DVR

USER MANUAL

DVR with Cloud Technology

Easy Link Series (EL421/EL821/EL1621)

Default user name: admin
Default password: 123456

KGUARD SECURITY
Cloud
16CH DIGITAL VIDEO RECORDER
HDMI

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About this Manual

The material in this document is for information purpose and is subject to change without prior notice. We made every effort to ensure that this user's manual is accurate and complete. However, no liability is assumed for any errors and omissions that may have occurred.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Declaration of Conformity

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Copyright

Limitation of Liability

- This publication is provided "AS IS" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability, fitness for any particular purpose, or non-infringement of a third party's rights.
- This publication may include technical inaccuracies or typographical errors. Changes may be made to the information herein, at any time, for publication improvements and/or of the corresponding device(s).

Disclaimer of Warranty

In no event shall the supplier be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to the following:

- Any damage or loss, including but without limitation, direct or indirect, special, consequential or exemplary, arising out of or relating to the device;
- Personal injury or any damage caused by inapppropriate use or negligent operation of the user;
- Unauthorized disassemble, repear or modification of the device by the user;
- Any problem, consequential inconvenience, or loss or damage, arising out of combining the system with the devices of a third party;
- Any claim or action for damages, brought by any person or organization being a photogenic subject, due to violation of privacy with the result of pictures from a surveillance camera, including saved data, for some reason, becomes public or is used for the purpose other than for surveillance.

Safety Information

Warning

This is the symbol for indicating any potential hazard, risk or condition requiring special attention.
The user needs to refer to the important operating and maintenance or servicing instructions.

Caution

The lighting flash with an arrow head symbol, in an equilateral triangle, is intended to alert the user.
There is dangerous "voltage" presence near by the product's enclosure which may be risk of person.

Safety Precautions

- **Do not touch live electrical parts.**
  Electric shock can be avoided. Follow the recommended practices listed below. Faulty installation, improper grounding, and incorrect operation and maintenance of electrical equipment are always sources of danger.
- **Do not try to install equipment outdoor, during strong wind and rain.**
- **Do not install or remove equipment outdoor, when raining.**
- **Do not try to install or operate any equipment, during a thunderstorm.**
- **Always ground all electrical equipment and the work platform.**
  Prevent accidental electrical shocks. Connect power source, control cabinets, and work platform to an approved electrical ground.
- **Always use the correct cable size.**
  Sustained overloading will cause cable failure and result in possible electrical shock or fire hazard. Work cable should be the same rating as the factory.
- **Always keep cables and connectors in good condition.**
  Improper or worn electrical connections can cause short circuits and can increase the chance of an electrical shock. Do not use worn, damaged, or bare cables.
- **Always avoid open-circuit voltage.**
  The added voltages increase the severity of electric shock hazard.
- **Always wear insulated gloves while you adjust equipment.**
  Electric power should be turned off and insulated gloves should be worn when making any equipment adjustment to assure shock protection.
- **Always wear protective clothing such as long sleeve shirts while you are installing or removing equipment.**
- **Always wear high, snug fitting shoes.**
- **Always wear clean clothes without grease or oil.**
- **Protect neighboring workers from exposure to arc radiation.**
- **Always wear long trousers or jeans while you are installing or removing equipment.**
- **Always wear safety helmet or hard head and safety shoes before work.**
- **Always keep the equipment in dry places.**
- **Always wear safety harnesses/belt while you work in high places.**
- **Always wear dry clothing and avoid moisture and water.**
- **Always wear Public Safety Vest, while you work at night.**
- **Make sure all electrical connections are tight, clean, and dry.**
- **Make sure that you are well insulated to eliminate electric static charge.**
- **Always wear dry gloves, rubber-soled shoes, or stand on a dry board or platform.**
- **Always follow recognized safety standards.**
- **Always wear correct eye, ear, and body protection.**
- **Always have second person on-site, while you work in dark, poor ventilation, or high places.**
- **Make sure that you are well protected against arc flashes, mechanical injury, or other mishaps.**
- **Make sure that the polarity of wire is correct before installing equipment.**
- **Always handle equipment with care.**
- **Do not block the ventilation of equipment.**
- **Do not put the magnetic parts around the equipment.**
- **Do not put the objects on top of the equipment.**

Chapter 1: Product Overview

1.1 Features

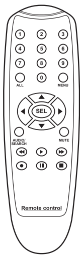
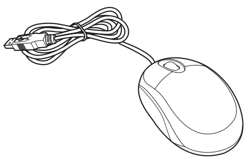
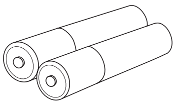
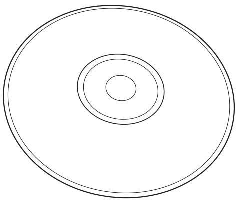
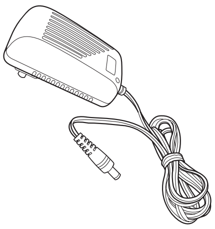
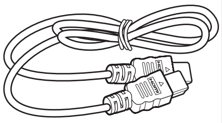
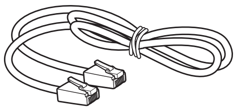
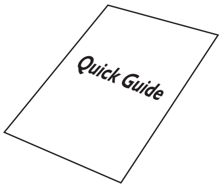
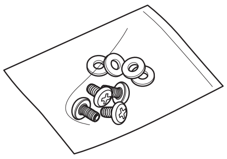
This device supports the following features:

- H.264 compression technology
- Advanced and friendly user interface with USB mouse control
- Supports simultaneous multi-channel playback with IE browser of videos recorded in different time frames
- Total online surveillance via IE/Safari browser for remote video & audio live view, playback, setup, backup and filing
- Built-in RS-485 port for PTZ control
- Pre-recording feature that allows additional images to be captured prior to the motion detected event
- Instant E-mail notification for alarm-triggered events
- Supports clock synchronization with NTP
- Privacy masks for private area protection (max. 4 areas per channel)
- Free downloadable KView series for remote monitoring and control via iPhone, iPad and Android hand-held devices
- USB 2.0 interface for easy backup
- KGUARD DDNS Service (kguard.org) included
- Support D1/960H recording and playback
- Viewable on widescreen LCD
- Real-time live display up to 16 cameras with 1080p high definition 1920x1080
- User Authorization and Authentication Management
- Exclusively connects to Cloud Service and has a personal storage space
- Support easy network setup on DVR for remote live view on smart phone/pad

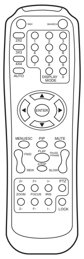
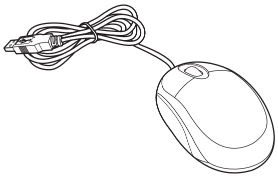
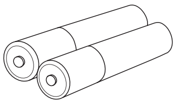
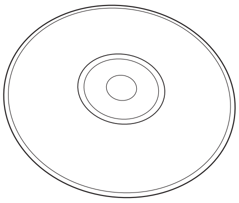
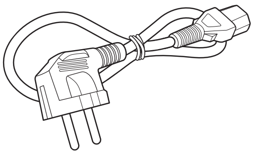
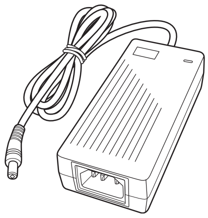
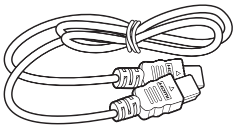
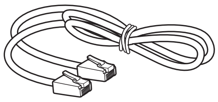
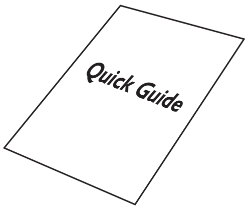
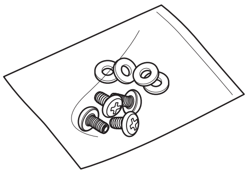
1.2 Accessories

The following items come with your package. If any of them is missing or damaged, please contact your retailer.

4-Channel / 8-Channel DVR

 Remote Control	 Mouse	 Batteries*	 CD-ROM	 Power Adapter
 HDMI Cable	 RJ45 Cable	 Quick Guide	 HDD Screw Kit	

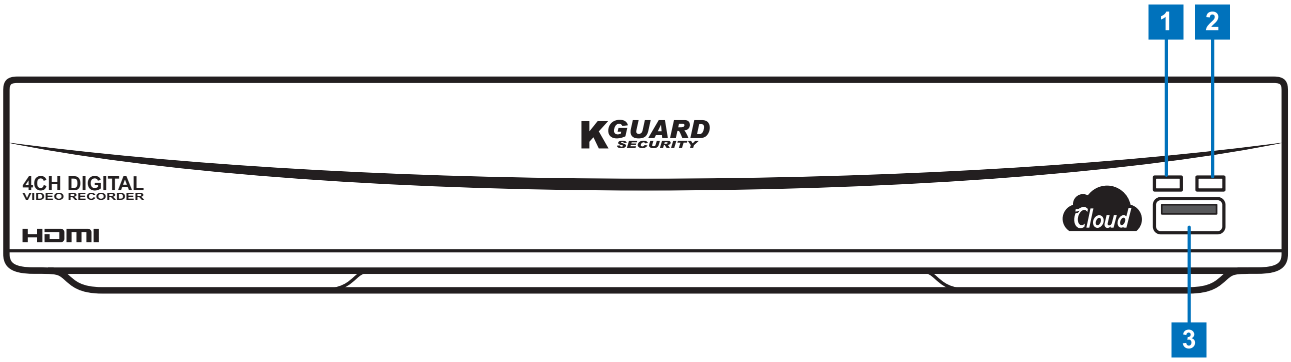
16-Channel DVR

 Remote Control	 Mouse	 Batteries*	 CD-ROM
 Power Cord	 Power Adapter	 HDMI Cable	 RJ45 Cable
 Quick Guide	 Internal HDD Screw Kit		

* Not available in all countries.

1.3 Parts and Functions

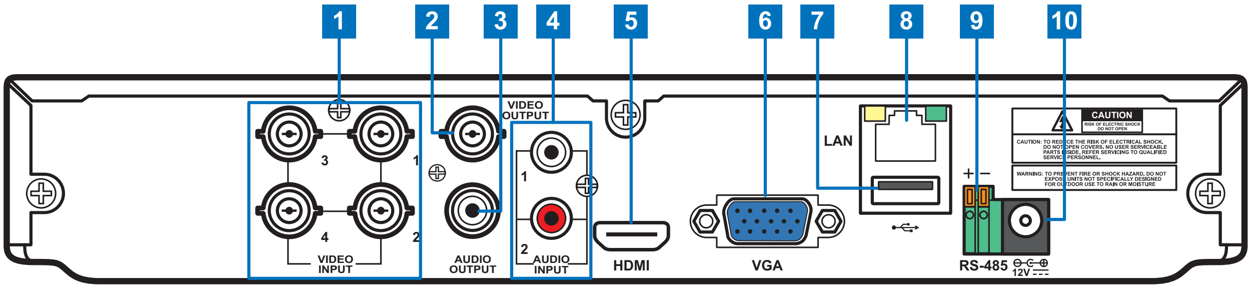
1.3.1 Front Panel


1
2
3
KGUARD SECURITY
4CH DIGITAL VIDEO RECORDER
HDMI
Cloud

No.	Item	Description
1	HDD Indicator	Lights red when the HDD is being accessed.
2	Power Indicator	Lights green to indicate the power is turned on.
3	USB port	Connects to a USB mouse, flash disk, and other external storage drive.

1.3.2 Rear Panel

4-Channel DVR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2
VIDEO INPUT
VIDEO OUTPUT
AUDIO OUTPUT
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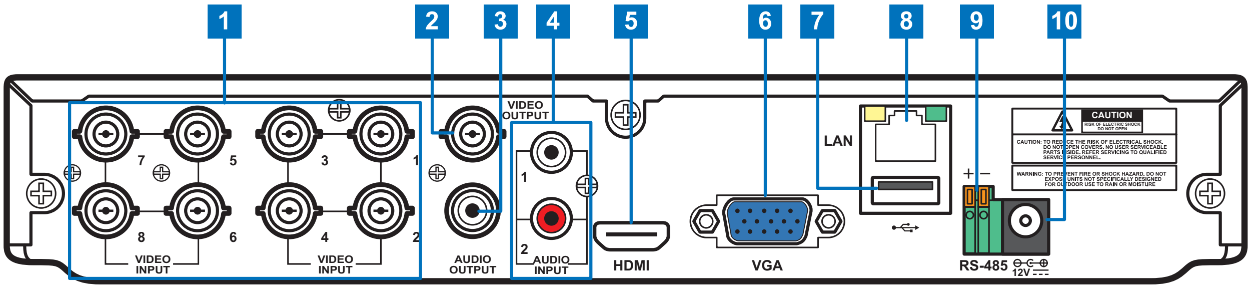
AUDIO INPUT
HDMI
VGA
LAN
CAUTION
+ −
RS-485
12V

8-Channel DVR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10
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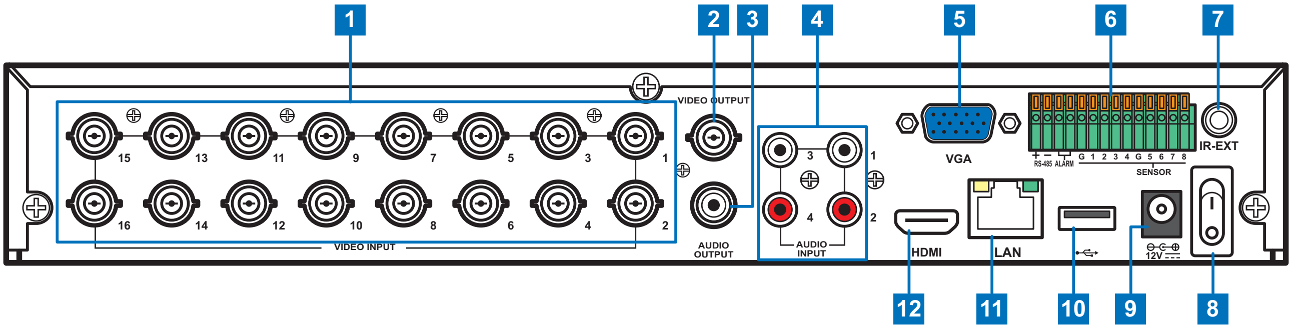
5
3
1
8
6
4
2
VIDEO INPUT
VIDEO INPUT
VIDEO OUTPUT
AUDIO OUTPUT
1
2
AUDIO INPUT
HDMI
VGA
LAN
CAUTION
+ −
RS-485
12V

No.	Connector	Description
1	Video input	8-Channel DVR: Connects to a maximum of 8 video input devices (BNC). 4-Channel DVR: Connects to a maximum of 4 video input devices (BNC).
2	Video output	Connects to a video output device via BNC.
3	Audio output	Connects to an audio output device via RCA.
4	Audio input	Connects to a maximum of 2 audio input devices via RCA.
5	HDMI output	Connects to a monitor output via HDMI.
6	VGA output	Connects to a VGA monitor.
7	USB port	Connects to a USB mouse, flash disk, and other external storage drive.
8	LAN	Connects to LAN via RJ-45.
9	RS-485	Connects to a Speed dome camera via RS-485.
10	Power	Connects to the power adapter.

16-Channel DVR



No.	Connector	Description
1	Video input	Connects to a maximum of 16 video input devices via BNC.
2	Video output	Connects to a video output device via BNC.
3	Audio output	Connects to an audio output device via RCA.
4	Audio input	Connects to a maximum of 4 audio input devices via RCA.
5	VGA output	Connects to a VGA monitor.
6	RS-485	Connects to a Speed dome camera, sensor or alarm device via RS-485.
7	IR-EXT port	Connects to an IR extender device.
8	Power switch	Press to turn the DVR on or off.
9	Power	Connects to the power adapter.
10	USB port	Connects to a USB mouse, flash disk, and other external storage drive.
11	LAN	Connects to LAN via RJ-45.
12	HDMI output	Connects to a monitor output via HDMI.

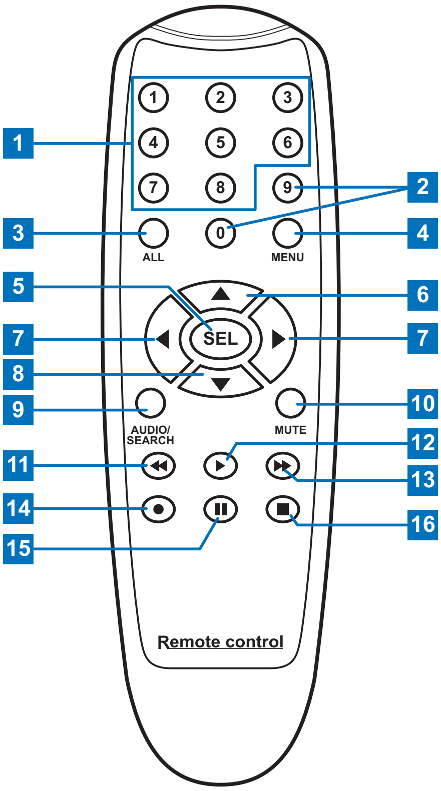
1.4 Mouse

The DVR is supplied with a USB mouse that you can use to operate the DVR. Simply plug in the supplied mouse into the USB mouse connector at the rear panel of the device.

Mouse Operation	Description
Left-click	In OSD menu, click the left button to select and edit the setting.
Right-click	In preview mode, click the right button to display the pop-up menu.
	In main menu or sub menu mode, click the right button to exit the current menu.
Double-click the Left button	Double-click the live image of any channel for full screen display. Double-click the left button again to return to the window-display of all cameras.
Drag an area/line	In motion mode, use this function to select motion area.
	In [Color Setup] menu mode, it will adjust color control bar.

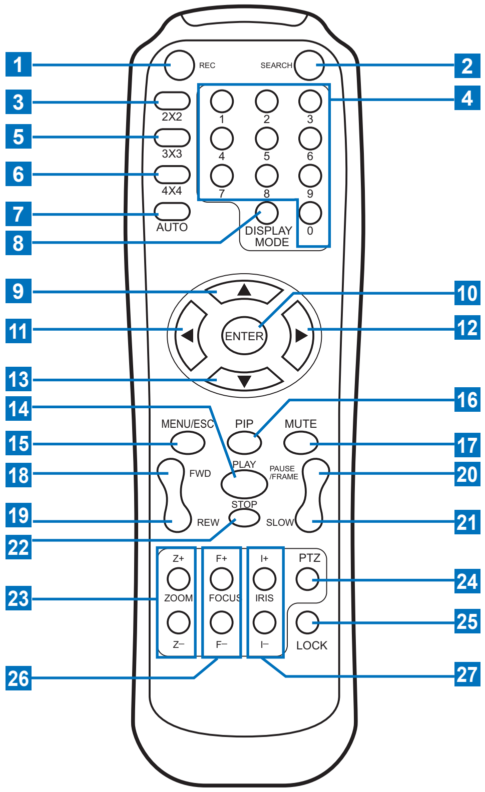
1.5 Remote Control

4-Channel / 8-Channel DVR



No.	Icon	Description
1	1 ~ 8	Numeric keys Press to display channel 1 ~ 8.
2	9, 0	Numeric keys Press “0” key to lock or unlock the current screen.
3	ALL	Press to display all channels.
4	MENU	Press to enter or exit the Main Menu.
5	SEL	Press to enter the selected menu item and edit the setting.
6	▲	Press to move up in the OSD menu.
7	◀ ▶	Press to move left or right in the OSD menu.
8	▼	Press to move down in the OSD menu.
9	Audio/ Search	In Playback mode, press to turn the audio on or off. Press to search for recorded video.
10	Mute	Press to turn mute on or off.
11	◀◀	Press to rewind during video playback.
12	▶	Press to play recorded video or enter the recording search menu.
13	▶▶	Press to fast forward during video playback.
14	●	Press to start manual recording.
15	❚❚	Press to pause the video playback or enter frame-playback mode.
16	■	Press to stop manual recording or stop the video playback.

16-Channel DVR


1
REC
SEARCH
2
3
2X2
1
2
3
4
5
3X3
4
5
6
6
4X4
7
8
9
7
AUTO
8
DISPLAY MODE
0
9
10
11
ENTER
12
13
14
MENU/ESC
PIP
MUTE
16
15
17
18
FWD
PLAY
PAUSE /FRAME
20
STOP
19
REW
SLOW
21
22
Z+
F+
I+
PTZ
24
23
ZOOM
FOCUS
IRIS
25
Z–
F–
I–
LOCK
26
27

No.	Icon	Description
1	⏻	Press to start manual recording.
2	SEARCH	Press to enter search mode.
3	2X2	Press to view a 2x2 channel display.
4	0-9	Numeric keys Press to display the channel in full screen. Press “0” key to lock or unlock the current screen.
5	3X3	Press to view a 3x3 channel display.
6	4X4	Press to view a 4x4 channel display.
7	AUTO	Press to enable auto rotate mode.
8	DISPLAY MODE	Press to toggle multi-window display (4-CH, 9-CH, 16-CH, Full Screen)
9	▲	Press to move up in the OSD menu.
10	ENTER	Press to enter the selected menu item and edit the setting.
11	◀	Press to move left in the OSD menu.
12	▶	Press to move right in the OSD menu.
13	▼	Press to move down in the OSD menu.

No.	Icon	Description
14	PLAY	Press to play recorded video.
15	MENU/ ESC	Press to enter or exit the Main Menu.
16	PIP	Press to enter Picture-in-Picture (PIP) mode.
17	MUTE	Press to mute audio or disable mute.
18	FWD	Press to fast forward video playback (x2, x4, x8).
19	REW	Press to rewind video playback (x2, x4, x8).
20	PAUSE/ FRAME	Press to pause video playback or enter frame-playback mode.
21	SLOW	Press to playback video in slow motion (1/2, 1/4, 1/8).
22	STOP	Press to stop video playback.
23	ZOOM	Press Z+ to zoom in or Z- to zoom out display.
24	PTZ	Press to configure PTZ settings.
25	LOCK	Press to lock the system.
26	FOCUS	Press F+ or F- to adjust focus.
27	IRIS	Press I+ or I- to adjust aperture.

Chapter 2: Installation

2.1 Installing the Hard Disk Drive

Depending on the package you have purchased, the hard disk drive may be included in the full package. If it is not pre-installed, follow the installation instructions on this user manual.

⚠ **DO NOT install or remove the hard disk drive while the device power is turned on.**

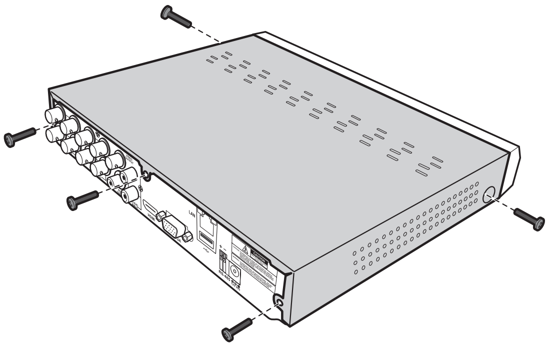
2.1.1 Installing HDD on 4-Channel / 8-Channel DVR

The 4-channel / 8-channel DVR supports one 3.5" SATA hard disk drive. To install the HDD, follow the steps below.

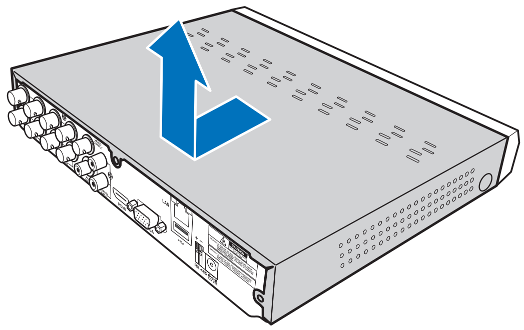
Note:

The illustrations below show an 8-channel DVR, same procedures apply to a 4-channel DVR.

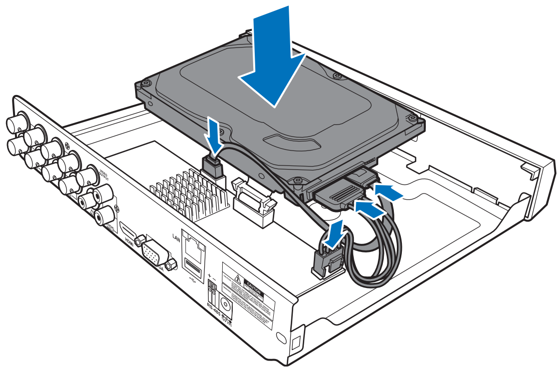
1 Loosen the screws in the left, right, and rear sides as shown.



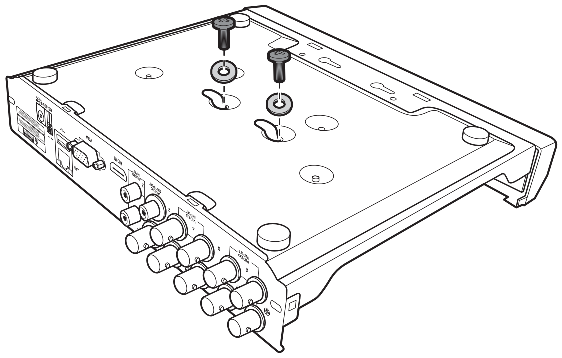
2 Push back then lift up the cover to remove it.



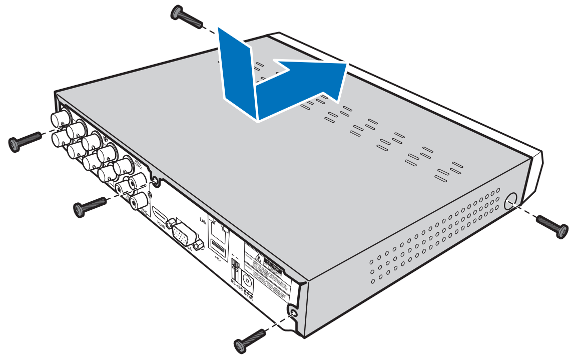
3 Connect the data and power cables to the hard disk drive (HDD) and place the HDD on the DVR case.



4 Align the HDD to the holes on the DVR case and secure the HDD using the two (2) supplied screws.



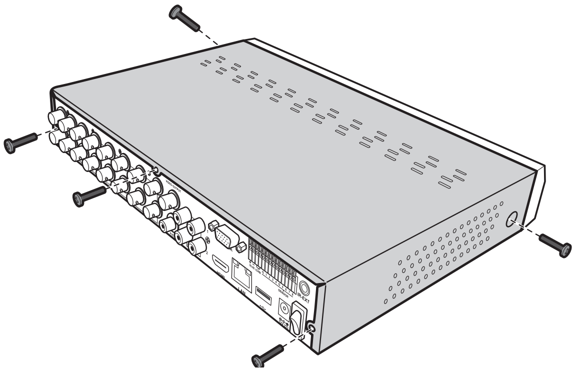
5 Attach the cover and the screws back in place.



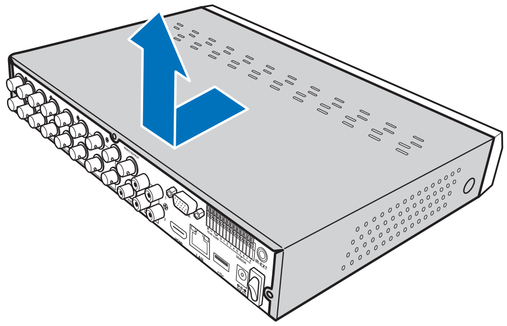
2.1.2 Installing HDD on 16-Channel DVR

The 16-channel DVR supports supports one 3.5” SATA hard disk drive. To install the HDD, follow the steps below.

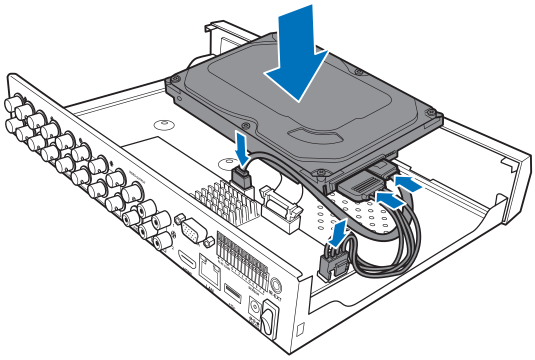
1 Loosen the screws on the left, right, and rear sides as shown.



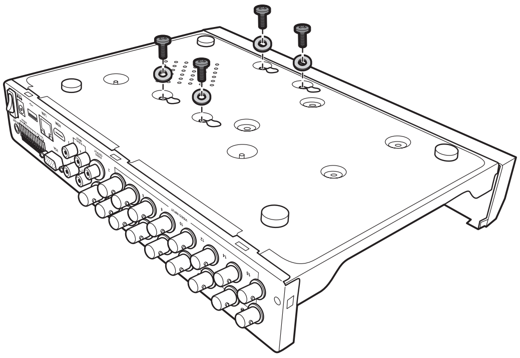
2 Push back then lift up the cover to remove it.



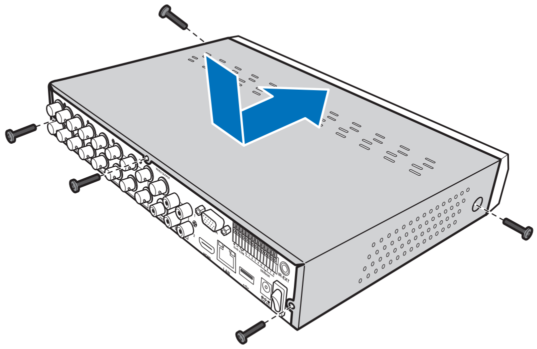
3 Connect the data and power cables to the hard disk drive (HDD) and place the HDD on the DVR case.



4 Align the HDD to the holes on the DVR case and secure the HDD using the four (4) supplied screws.



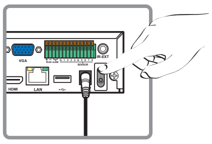
5 Attach the cover and the screws back in place.

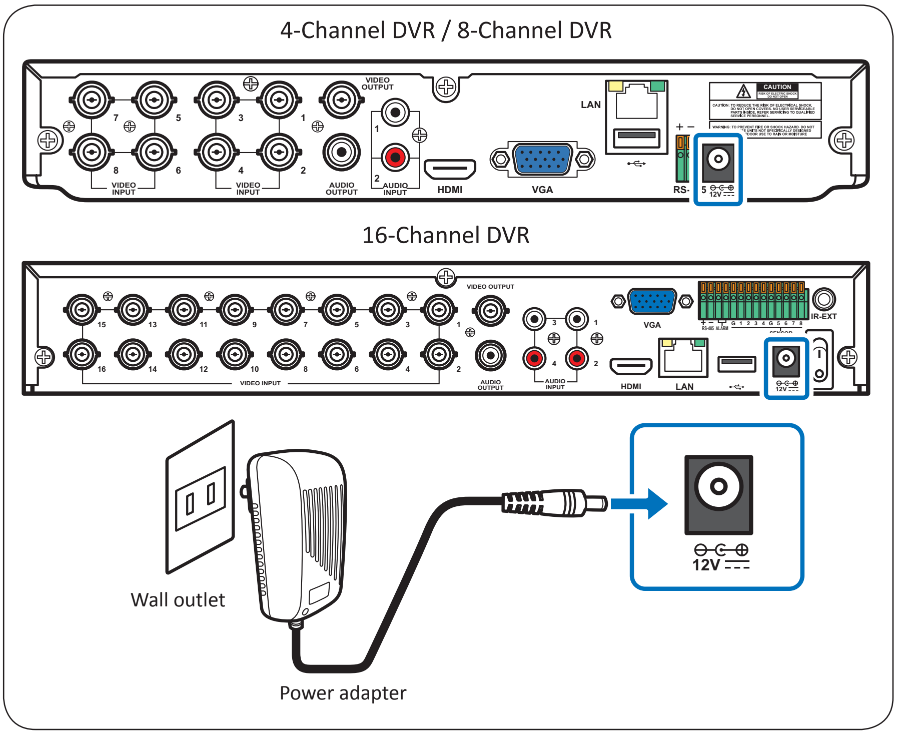


2.2 Connecting the Power

Use only the supplied power adapter that came with the DVR.

1. Connect one end of the power adapter to the power connector on the back of the DVR.
2. Plug the other end of the power adapter into the wall outlet.
3. For 4-channel/8-channel models, the DVR automatically powers on.
   For a 16-channel DVR, press the Power switch to turn on the power.


VGA
HDMI
LAN

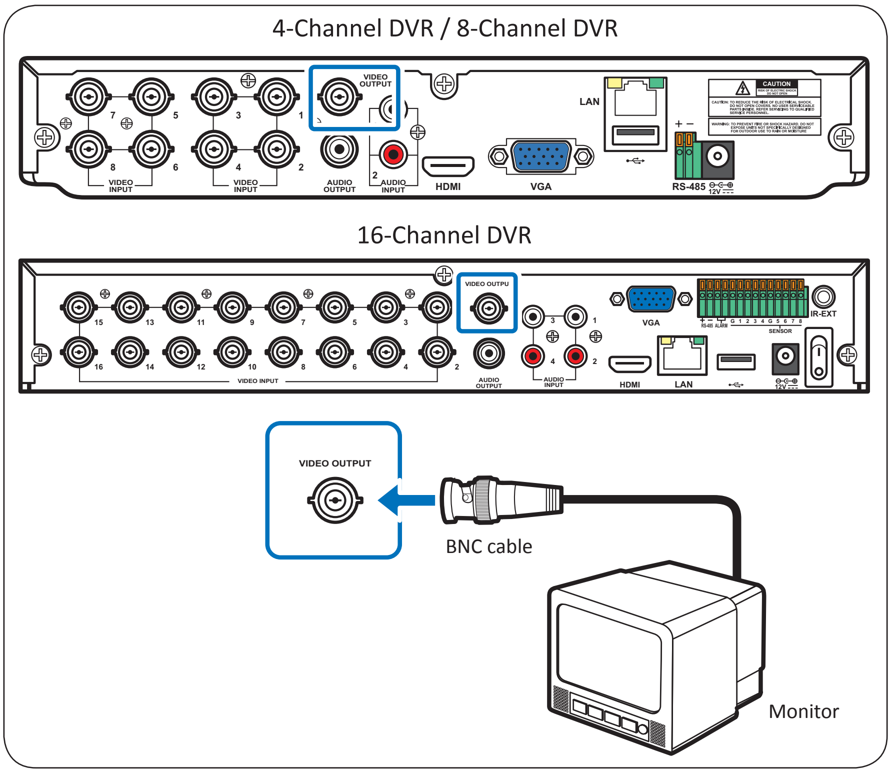

4-Channel DVR / 8-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
LAN
CAUTION
RS-
12V
16-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
VGA
IR-EXT
SENSOR
HDMI
LAN
12V
Wall outlet
Power adapter
12V

2.3 Connecting to Monitors

The preview screen can be displayed on monitors via BNC, VGA, or HDMI connection.

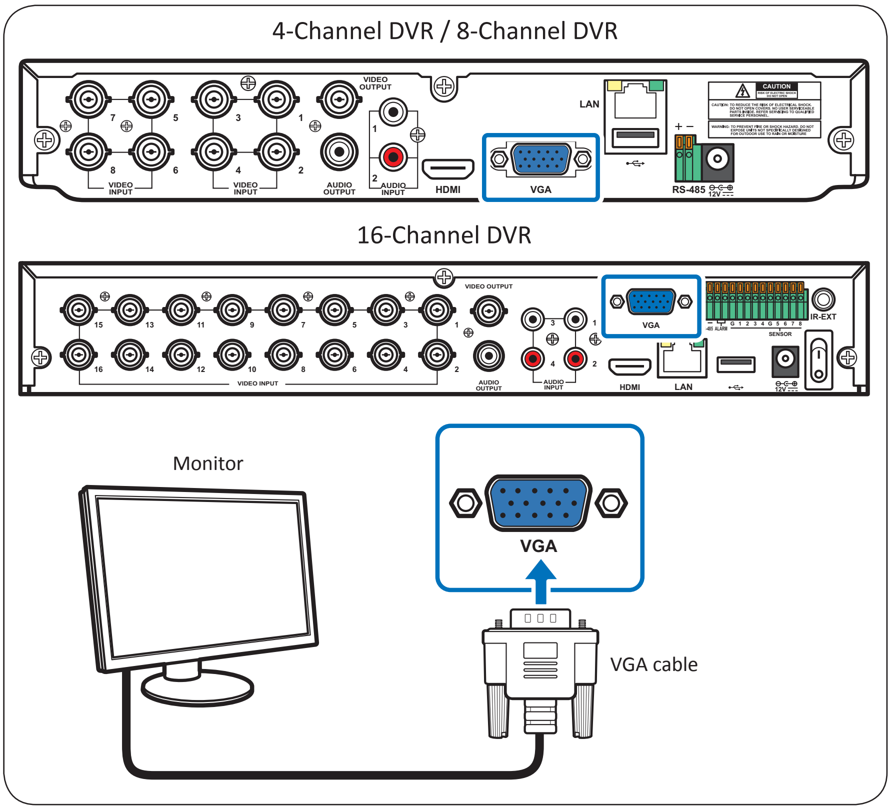
2.3.1 BNC Connection

Connect the video output of the DVR to the monitor via BNC connector as shown.


4-Channel DVR / 8-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
LAN
CAUTION
RS-485
12V
16-Channel DVR
VIDEO OUTPU
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
VGA
IR-EXT
SENSOR
HDMI
LAN
12V
VIDEO OUTPUT
BNC cable
Monitor

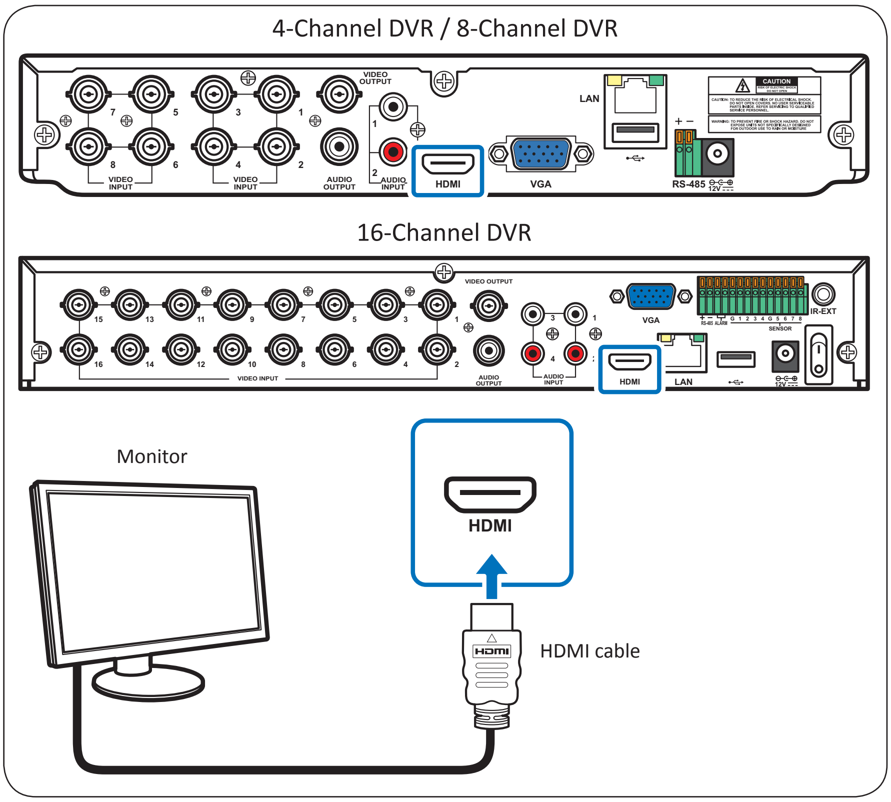
2.3.2 VGA Connection

Connect the video output of the DVR to the monitor via VGA connector as shown.


4-Channel DVR / 8-Channel DVR
VIDEO OUTPUT
LAN
CAUTION
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
RS-485
12V
16-Channel DVR
VIDEO OUTPUT
VGA
IR-EXT
SENSOR
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
LAN
12V
Monitor
VGA
VGA cable

2.3.3 HDMI Connection

Connect the video output of the DVR to the monitor via HDMI connector as shown.


4-Channel DVR / 8-Channel DVR
VIDEO OUTPUT
LAN
CAUTION
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
RS-485
12V
16-Channel DVR
VIDEO OUTPUT
VGA
IR-EXT
SENSOR
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
LAN
12V
Monitor
HDMI
HDMI cable

2.4 Connecting the Cameras

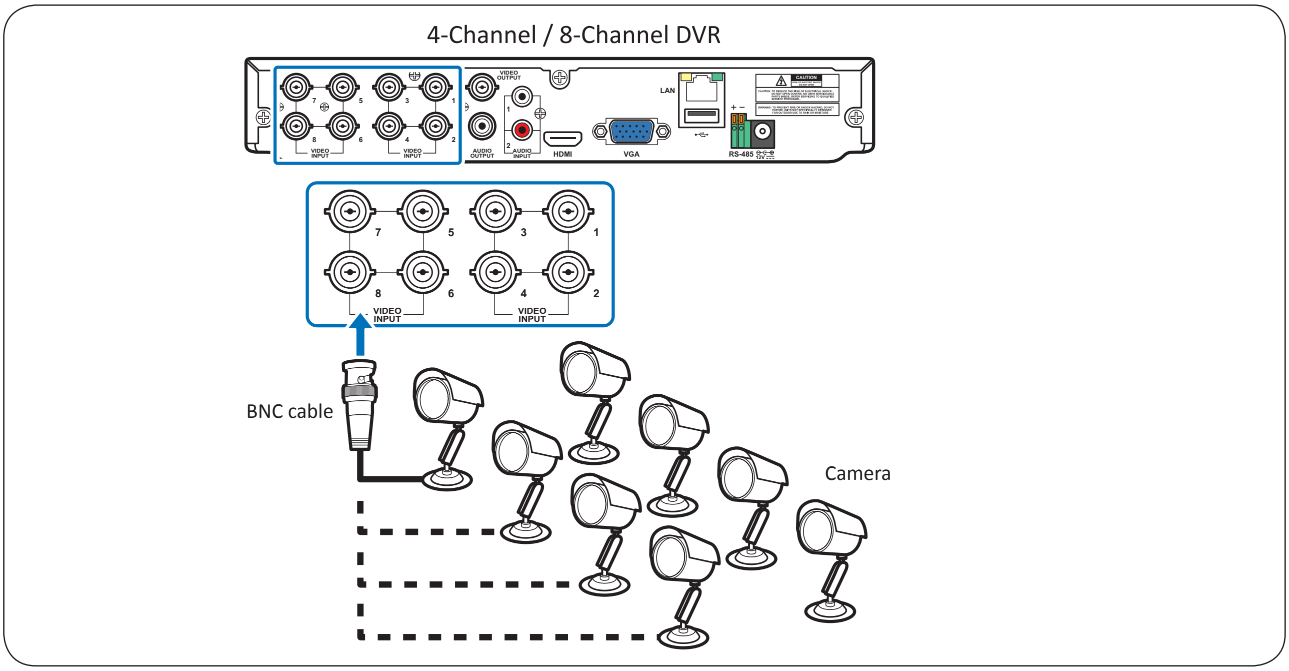
Connect the camera cable(s) to the video input of the DVR via BNC or RS-485 connection.

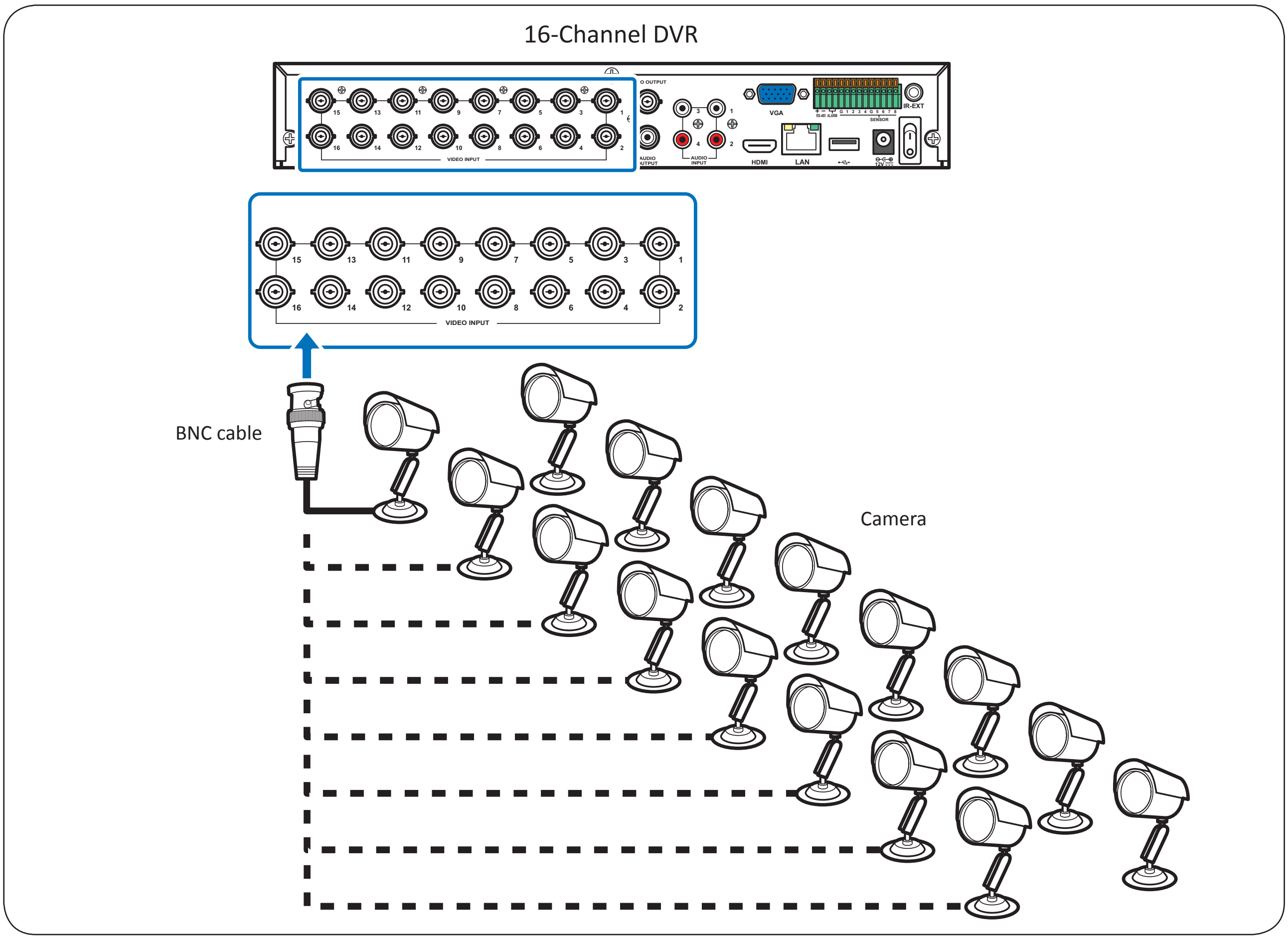
2.4.1 BNC Connection

Connect the camera cable(s) to the video input of the DVR via BNC connector as shown.

Note:

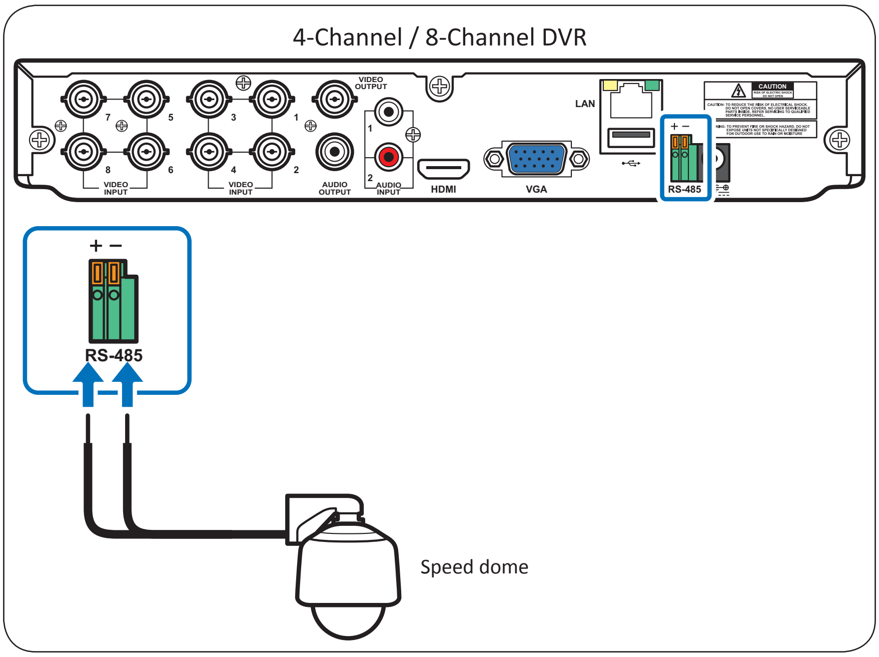
The illustration below is of an 8-channel DVR. For 4-channel DVRs, only four video input connection via BNC are available.

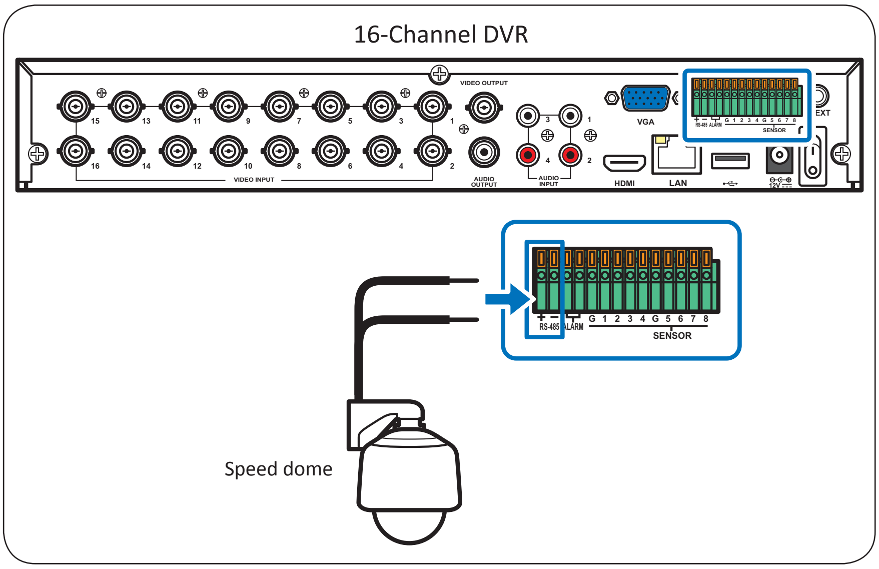

4-Channel / 8-Channel DVR
VIDEO OUTPUT
LAN
CAUTION
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
RS-485
12V
7
5
3
1
8
6
4
2
VIDEO INPUT
VIDEO INPUT
BNC cable
Camera


16-Channel DVR
OUTPUT
VGA
IR-EXT
SENSOR
AUDIO OUTPUT
AUDIO INPUT
HDMI
LAN
12V
15
13
11
9
7
5
3
1
16
14
12
10
8
6
4
2
VIDEO INPUT
BNC cable
Camera

2.4.2 RS-485 Connection

If you are using a PTZ speed dome, connect the camera cable to the video input of the DVR via RS-485 connector as shown.

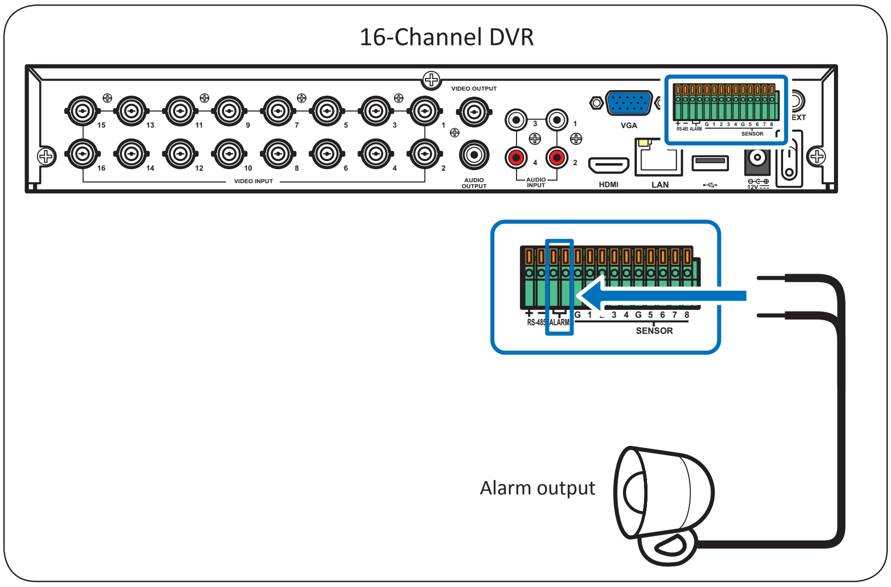

4-Channel / 8-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
LAN
CAUTION
RS-485
+ –
RS-485
Speed dome


16-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
VGA
EXT
HDMI
LAN
12V
+ –
RS-485
ALARM
G 1 2 3 4 G 5 6 7 8
SENSOR
Speed dome

2.5 Connecting the Alarm

Note:
Available in 16-channel DVRs only.

You can connect one alarm device via RS-485 connection as shown.

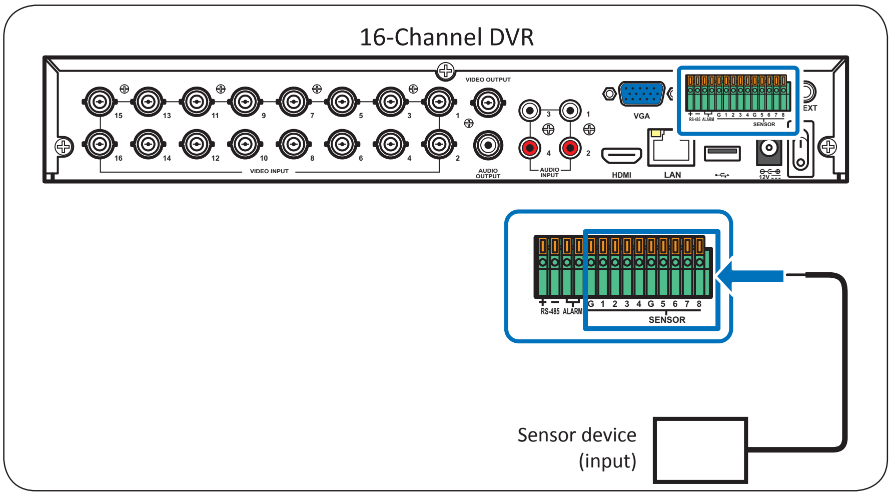

16-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
VGA
EXT
HDMI
LAN
12V
+ –
RS-485
ALARM
G 1 2 3 4 G 5 6 7 8
SENSOR
Alarm output

2.6 Connecting the Sensors

Note:

Available in 16-channel DVRs only.

You can connect sensors up to 8 channels. The connectors are labelled according to channels.

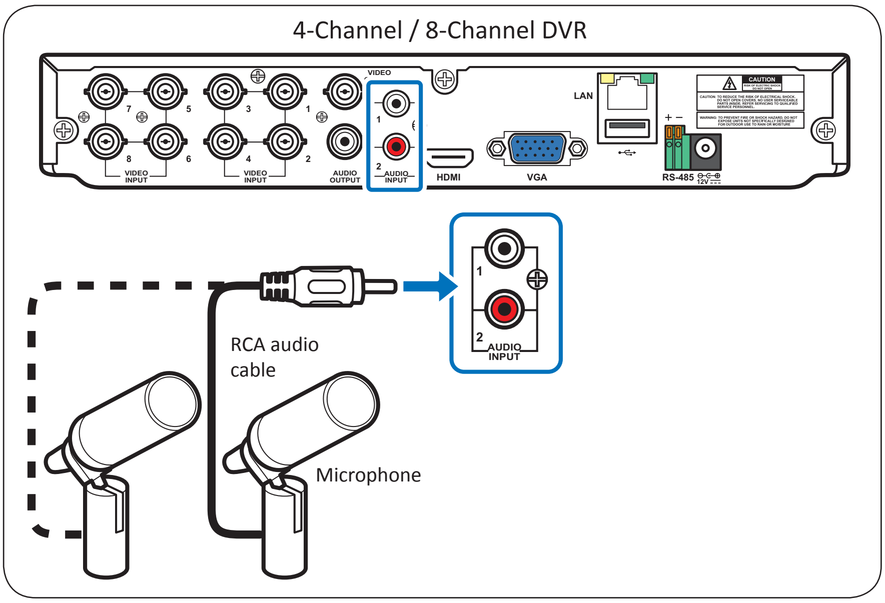

16-Channel DVR
VIDEO OUTPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
VGA
HDMI
LAN
EXT
12V
RS-485 ALARM
G 1 2 3 4 G 5 6 7 8
SENSOR
Sensor device
(input)

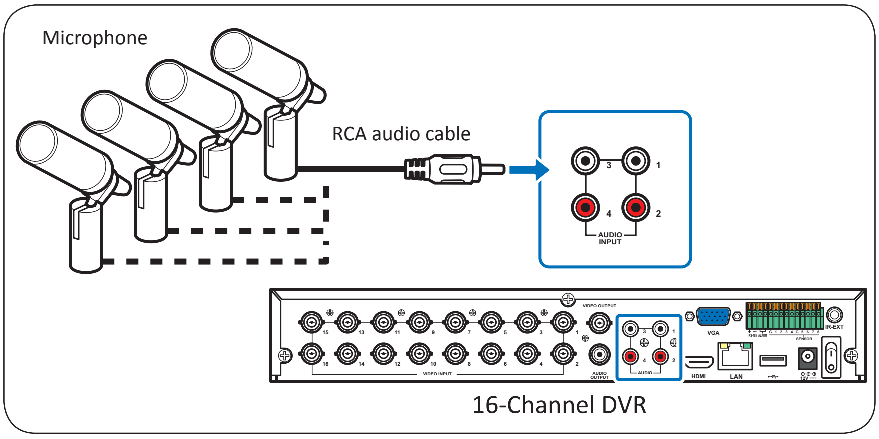
2.7 Connecting the Microphones

The DVR supports up to 4 audio input channels. Microphones can be connected directly via RCA connection.

2.7.1 RCA Connection

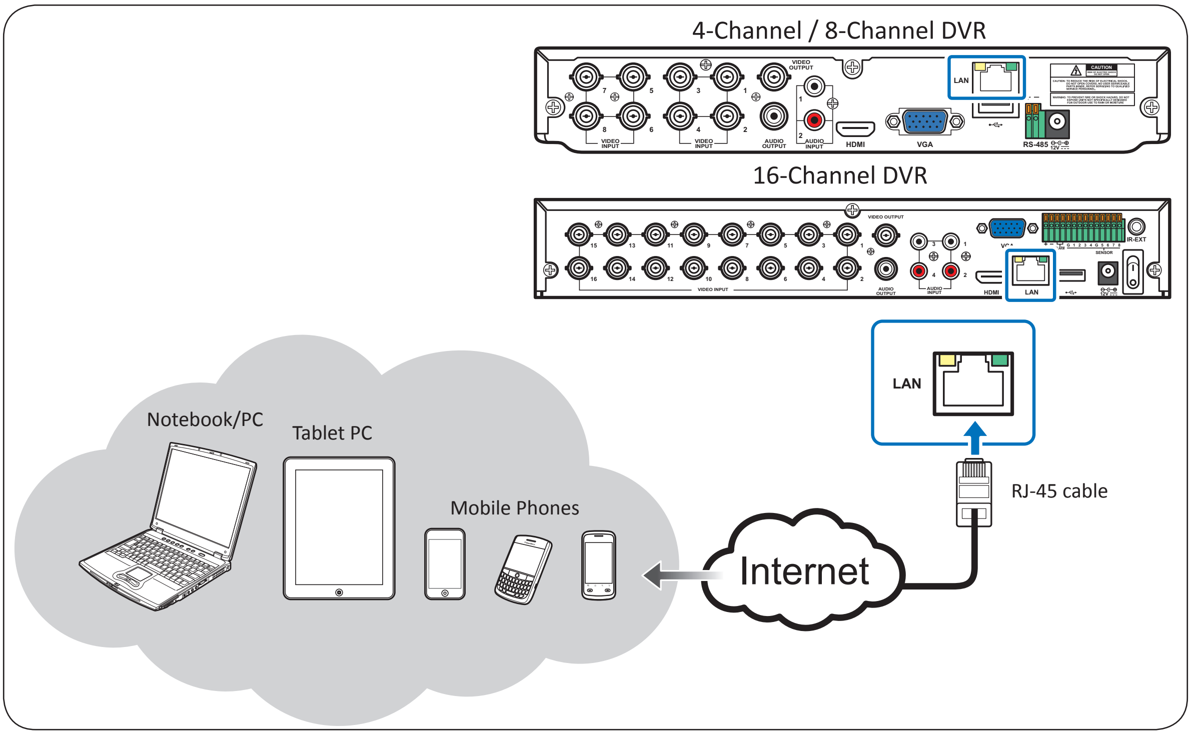
Connect the microphone(s) using RCA cable connection as shown.


4-Channel / 8-Channel DVR
VIDEO
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
LAN
HDMI
VGA
RS-485
12V
CAUTION
RCA audio
cable
Microphone
1
2
AUDIO
INPUT


Microphone
RCA audio cable
3
1
4
2
AUDIO
INPUT
VIDEO OUTPUT
VIDEO INPUT
VGA
HDMI
LAN
16-Channel DVR

2.8 Connecting to Network

For remote monitoring, connect the DVR to the internet via wired network connection.


4-Channel / 8-Channel DVR
16-Channel DVR
LAN
RJ-45 cable
Internet
Notebook/PC
Tablet PC
Mobile Phones
VIDEO INPUT
VIDEO OUTPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
RS-485
SENSOR
IR-EXT
CAUTION

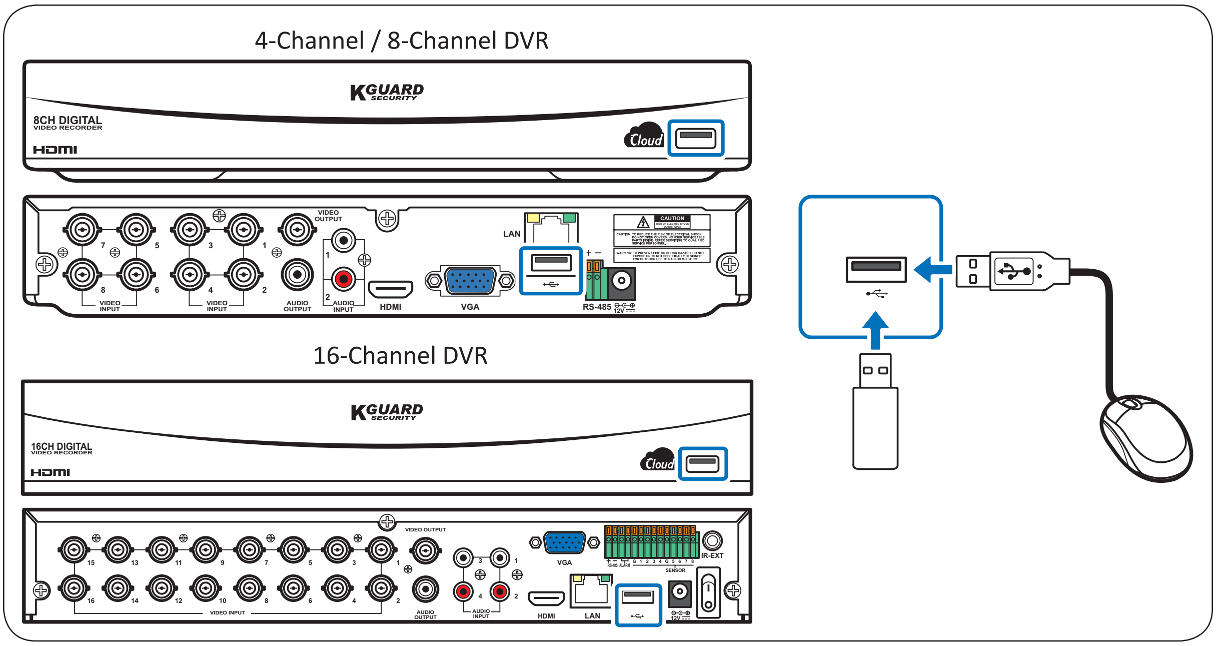
1 Plug one end of the RJ-45 cable to the LAN port on the back of the DVR.

2 Plug the other end directly into a LAN port on a router or network switch.

After connecting, configure your DVR for network communication. See “4.4 Setting the Network” on page 52 for further details.

2.9 Connecting to Other Devices

You can connect other devices such as a mouse and a USB storage drive to the DVR. Connect them to the USB port on the back or the front of the DVR.

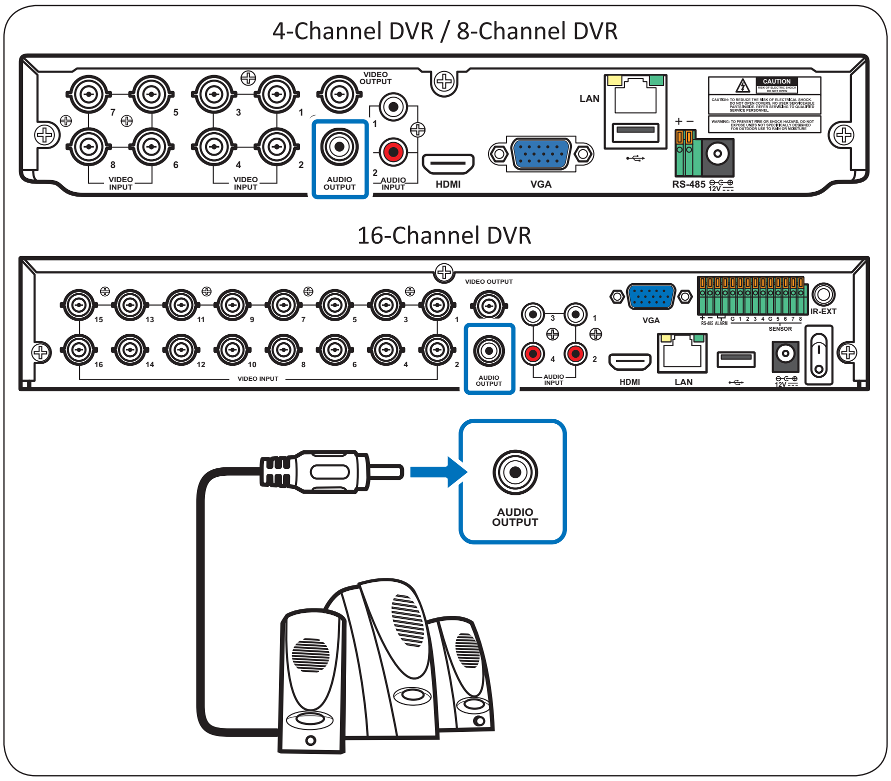

4-Channel / 8-Channel DVR
16-Channel DVR
KGUARD SECURITY
8CH DIGITAL VIDEO RECORDER
16CH DIGITAL VIDEO RECORDER
HDMI
Cloud
LAN
VIDEO INPUT
VIDEO OUTPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
RS-485
SENSOR
IR-EXT
CAUTION

2.10 Connecting to Speakers

You can connect speakers to the DVR via RCA connection.

2.10.1 RCA Connection

Connect the speaker using RCA cable connection as shown.

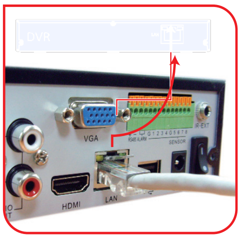

4-Channel DVR / 8-Channel DVR
VIDEO OUTPUT
7
5
3
1
8
6
4
2
VIDEO INPUT
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
HDMI
VGA
LAN
CAUTION
RS-485
12V
16-Channel DVR
VIDEO OUTPUT
15
13
11
9
7
5
3
1
16
14
12
10
8
6
4
2
VIDEO INPUT
AUDIO OUTPUT
AUDIO INPUT
VGA
IR-EXT
SENSOR
HDMI
LAN
12V
AUDIO OUTPUT

Chapter 3: Getting Started

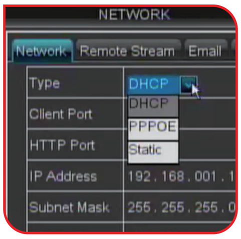
3.1 Easy Network Setup for Remote Live View on Smart Phone/Pad

The outstanding feature of this DVR is that you do not need to do any complicated network settings to set up the DVR for remote live view on smart phone/pad. In a DHCP typical personal home LAN (Local Area Network), basic steps are as below:

Connect a RJ45 cable


DVR
VGA
HDMI
LAN

Complete Network settings


NETWORK
Network
Remote Stream
Email
DHCP
PPPOE
Static

Type: DHCP
Client Port
HTTP Port
IP Address: 192 . 168 . 001 . 1
Subnet Mask: 255 . 255 . 255 . 0

Install APP

Scan QR code

4CH DIGITAL
HDMI

Live view

1 Connect the power adapter to the DVR. See “2.2 Connecting the Power” on page 17 for further details.

2 Connect the DVR to network. See “2.8 Connecting to Network” on page 22 for further details.

Note:

To enable remote monitoring, recording, playing, or configuring the setting via KGUARD Web Client or Kview Center software, you still need to configure the network settings and setup port forwarding in Router. See “4.4.1 Network Settings” on page 52 for further details.

3 Download **KViewQR** application on your smart phone/pad. See “6.1 KViewQR” on page 107” for further details.

4 Add the connected DVR by scanning the QR code. Once the router provides IP address to DVR, the Live screen appears.

Note:

- We suggest your smart phone/pad using WIFI, and connecting to the same Router as DVR.
- The default user name and password are:
  - User Name: **admin**
  - Password: **123456**

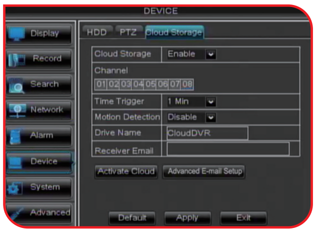
  For system security, we suggest you change the password in DVR to protect your privacy. See “4.7.2 User and Password Settings” on page 67 for further details.

3.2 Upload images to Cloud

You can also setup a cloud storage account and receive snapshots from your DVR. See “4.6.3 Cloud Storage” on page 62 for further details.

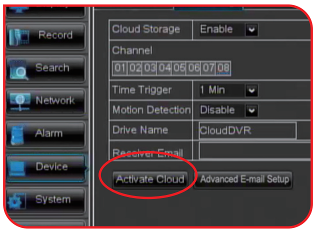
At present, your DVR supports the Dropbox cloud storage. Before setting up the cloud storage on the DVR, make sure your Dropbox account has been created and active (Dropbox website: www.dropbox.com) and the Network settings of your DVR has been configured properly, see “4.4.1 Network Settings” on page 52.

1 Main Menu > Device > Cloud Storage


DEVICE
Display
Record
Search
Network
Alarm
Device
System
Advanced
HDD
PTZ
Cloud Storage
Activate Cloud
Advanced E-mail Setup
Default
Apply
Exit

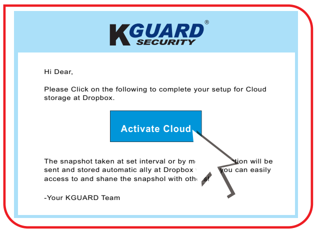
Cloud Storage: Enable
Channel: 01 02 03 04 05 06 07 08
Time Trigger: 1 Min
Motion Detection: Disable
Drive Name: CloudDVR
Receiver Email

2 Set and active Cloud


Record
Search
Network
Alarm
Device
System
Activate Cloud
Advanced E-mail Setup

Cloud Storage: Enable
Channel: 01 02 03 04 05 06 07 08
Time Trigger: 1 Min
Motion Detection: Disable
Drive Name: CloudDVR
Receiver Email

3 Check mail box within 3 minutes to activate Cloud.


KGUARD SECURITY
Activate Cloud

Hi Dear,

Please Click on the following to complete your setup for Cloud storage at Dropbox.

The snapshot taken at set interval or by m tion will be sent and stored automatic ally at Dropbox you can easily access to and shane the snapshol with oth s!

-Your KGUARD Team

4 Success!

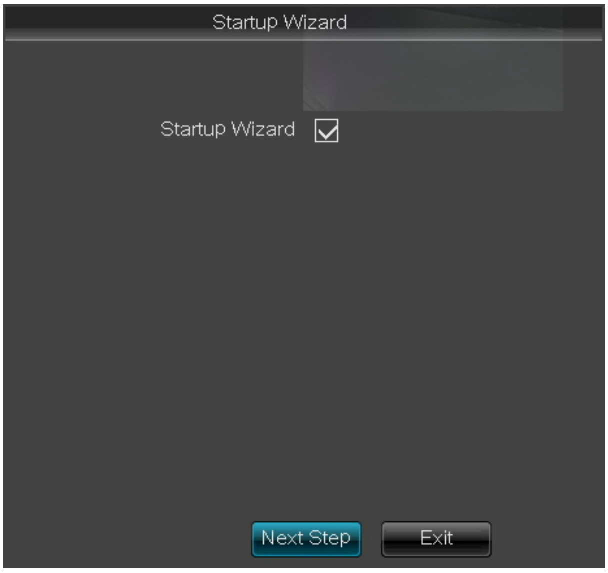
Cloud
Internet
KGUARD

3.3 Starting Up

Connect the power adapter to the DVR. See “2.2 Connecting the Power” on page 17 for further details.

3.4 Set Startup Wizard

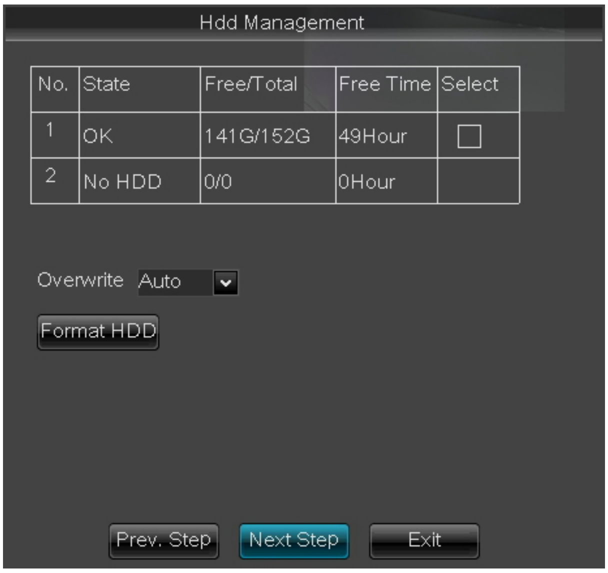
1 When the Startup Wizard screen appears on the screen, click **Next Step** to continue.


Startup Wizard
Next Step
Exit

Startup Wizard ☑

To cancel the Startup Wizard, uncheck the “✓“ icon on the checkbox and click **Exit** to close the current menu. The Startup Wizard will not appear after the system reboots.

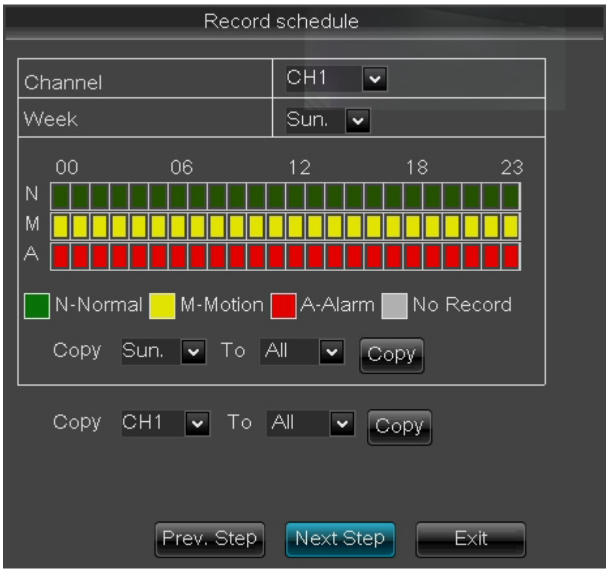
2 Format the hard disk drive. See “Formatting HDD” on page 60.


Hdd Management
Format HDD
Prev. Step
Next Step
Exit

No.	State	Free/Total	Free Time	Select
1	OK	141G/152G	49Hour	☐
2	No HDD	0/0	0Hour	

Overwrite Auto

3 Set the recording schedule. See “4.2 Record Setup” on page 42.


Record schedule
00
06
12
18
23
N
M
A
🟩 N-Normal 🟨 M-Motion 🟥 A-Alarm ▨ No Record
Copy
Prev. Step
Next Step
Exit

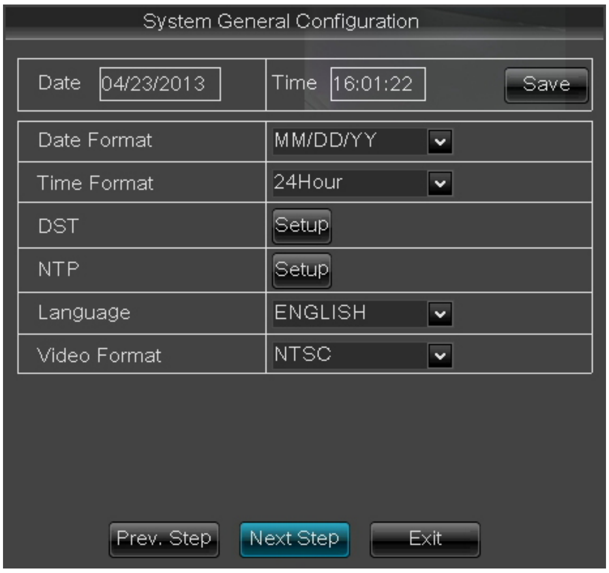
Channel: CH1

Week: Sun.

Copy Sun. To All

Copy CH1 To All

4 Set the date, time, OSD language, and video format settings. See “4.7.1 General Settings” on page 65.

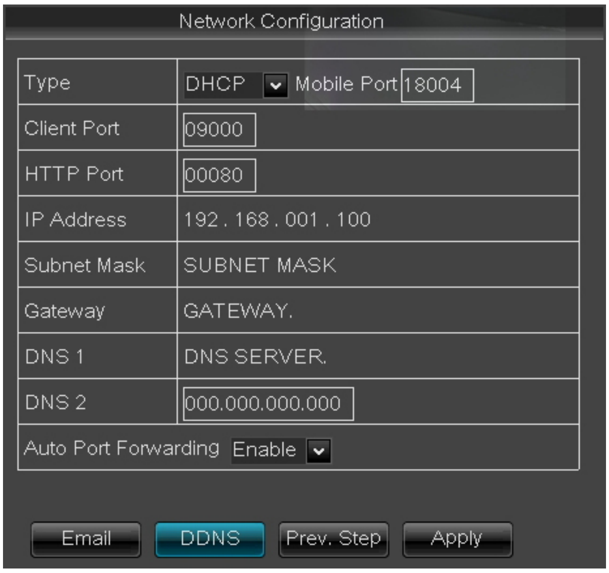

System General Configuration
Save
Prev. Step
Next Step
Exit

Date 04/23/2013

Time 16:01:22

Date Format	MM/DD/YY
Time Format	24Hour
DST	Setup
NTP	Setup
Language	ENGLISH
Video Format	NTSC

5 Set the network and email settings. See “4.4.1 Network Settings” on page 52 and “4.4.3 Email Settings” on page 54.

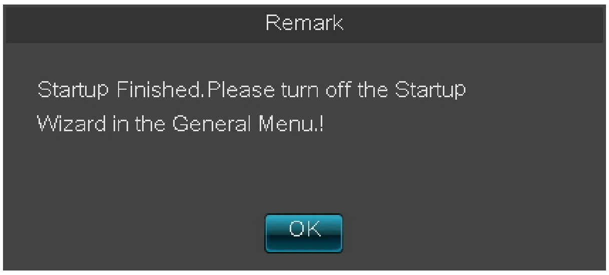


Network Configuration

Type	DHCP Mobile Port 18004
Client Port	09000
HTTP Port	00080
IP Address	192 . 168 . 001 . 100
Subnet Mask	SUBNET MASK
Gateway	GATEWAY.
DNS 1	DNS SERVER.
DNS 2	000.000.000.000
Auto Port Forwarding Enable	

6 Click **Apply** to save the settings.

7 When the initial setup process is complete, click **OK**.



Remark

Startup Finished.Please turn off the Startup Wizard in the General Menu.!

Note:
To prevent the Wizard Setup screen appears every time the system reboots, set the **StartupWizard** setting to **Disable** in **ADVANCED** menu.

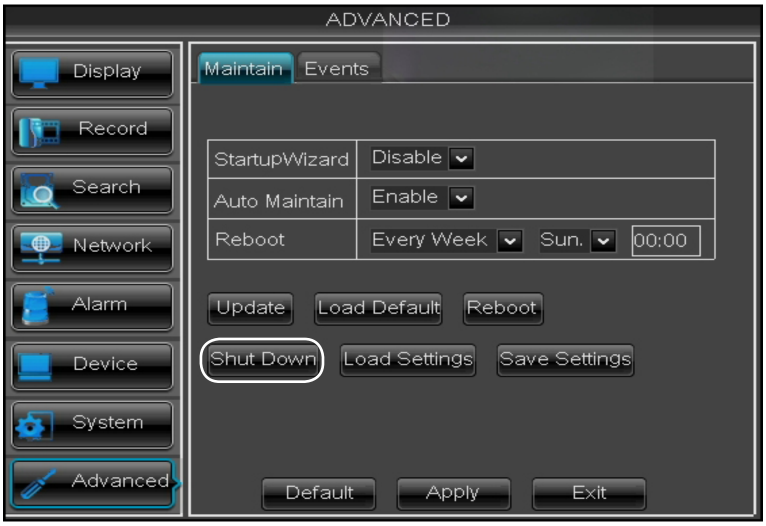
3.5 Shutting Down

To properly turn off the DVR power, do the following:

1 In the preview mode, right-click on the mouse to display the pop-up menu on the bottom of the screen.

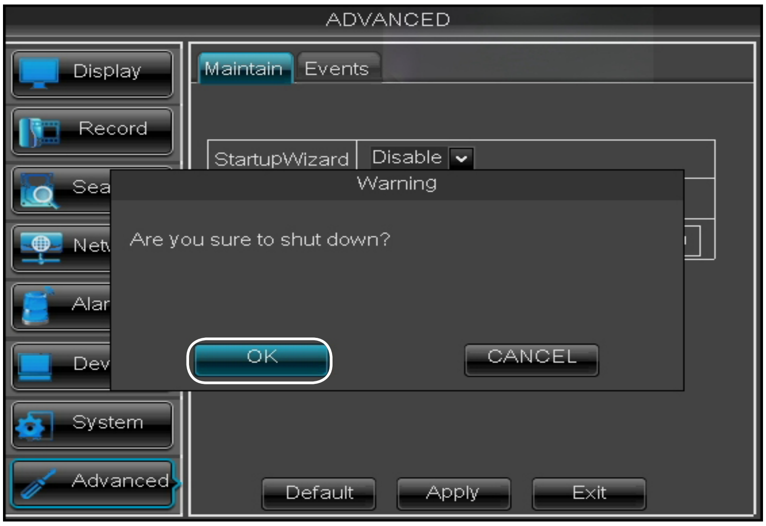
2 Select **Main Menu** > **ADVANCED**, and then click **Shut Down**.

You can also access the main menu by pressing the **MENU** button on the remote control or the **Menu** key on the front panel.


ADVANCED
Display
Record
Search
Network
Alarm
Device
System
Advanced
Maintain
Events
Update
Load Default
Reboot
Shut Down
Load Settings
Save Settings
Default
Apply
Exit

StartupWizard	Disable
Auto Maintain	Enable
Reboot	Every Week Sun. 00:00

3 A warning message appears on the screen, select **OK** to turn off the power.


ADVANCED
Display
Record
Sea
Netw
Alar
Dev
System
Advanced
Maintain
Events
StartupWizard
Disable
Warning
OK
CANCEL
Default
Apply
Exit

Are you sure to shut down?

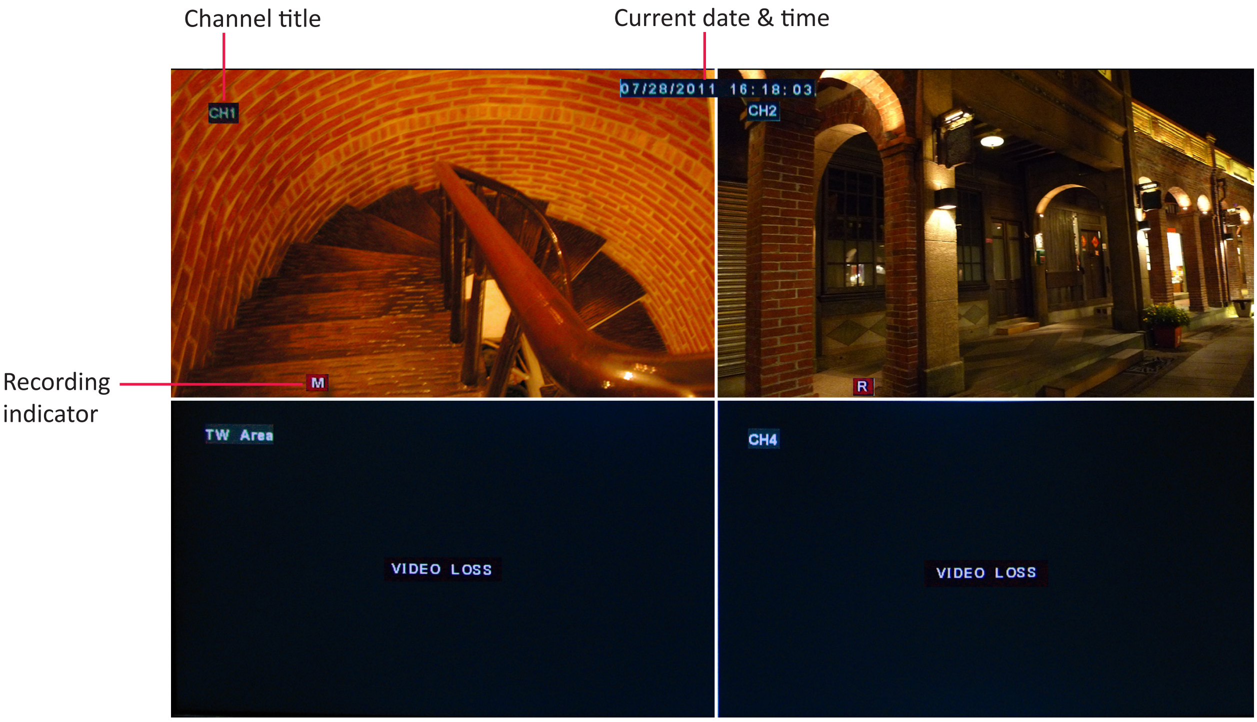
4 Wait until the “Now you can unplug the power!” message appears on the screen.

5 Turn off the power switch on the back panel of the DVR (for 16-channel DVR only) and then unplug the power cord from the power outlet.

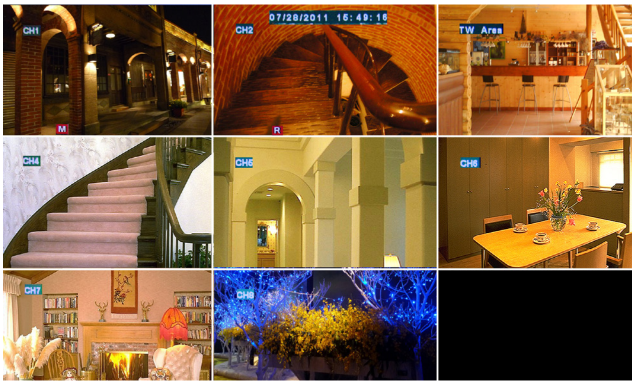
3.6 The Main Screen

3.6.1 Screen Icons

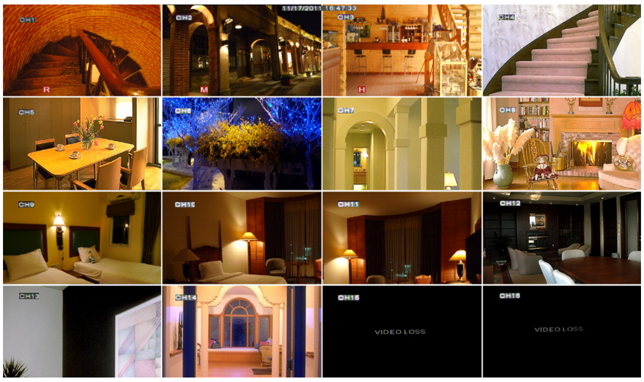
There are four types of recording indicator on the main screen of each channel.


Channel title
Current date & time
Recording indicator
CH1
07/28/2011 16:18:03
CH2
M
R
TW Area
CH4
VIDEO LOSS
VIDEO LOSS

4-window display



8-window display



16-window display

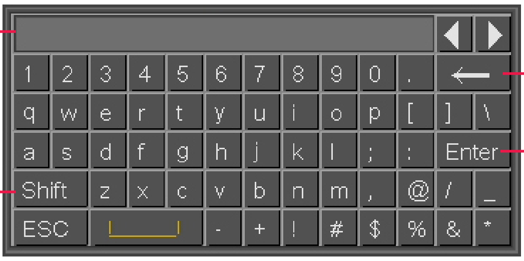
Icon	Description
M	Motion detector is activated.
H	Hard disk drive memory is full.
	Cannot detect hard disk drive.
R	Video recording is in progress.
VIDEO LOSS	Video loss.

Note:

- During recording mode, [R] icon or [M] icon appears on the screen. If [M] icon is displayed on the screen, it indicates that motion detection is enabled.
- If the “VIDEO LOSS” appears on the screen, check the camera connection.

3.6.2 Virtual Keyboard

The virtual keyboard automatically appears on the screen if data entry is required.


1 2 3 4 5 6 7 8 9 0 . ←
q w e r t y u i o p [ ] \
a s d f g h j k l ; : Enter
Shift z x c v b n m , @ / _
ESC - + ! # $ % & *

Typed characters are displayed here.

Click to toggle the keyboard to upper case.

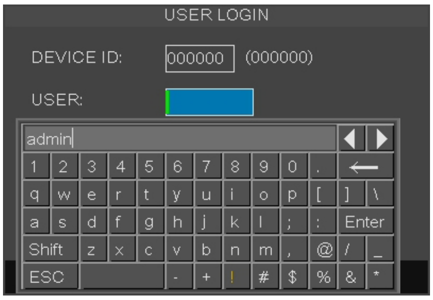
Click to delete a character.

Click to enter the text.

3.6.3 Locking the Screen

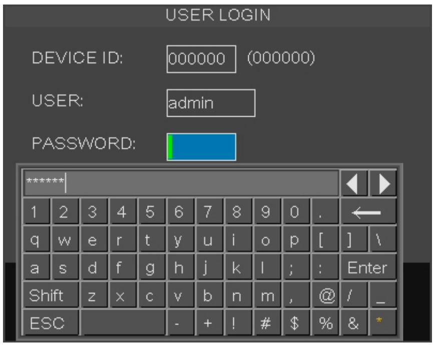
The screen is locked to protect unauthorized OSD operation. Enter the user name and password before entering the OSD menu.

The default user name and password are:
User Name: **admin**
Password: **123456**



DEVICE ID: 000000 (000000)
USER:
admin

Enter User Name

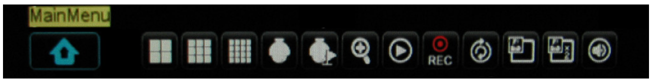


DEVICE ID: 000000 (000000)
USER: admin
PASSWORD:
******

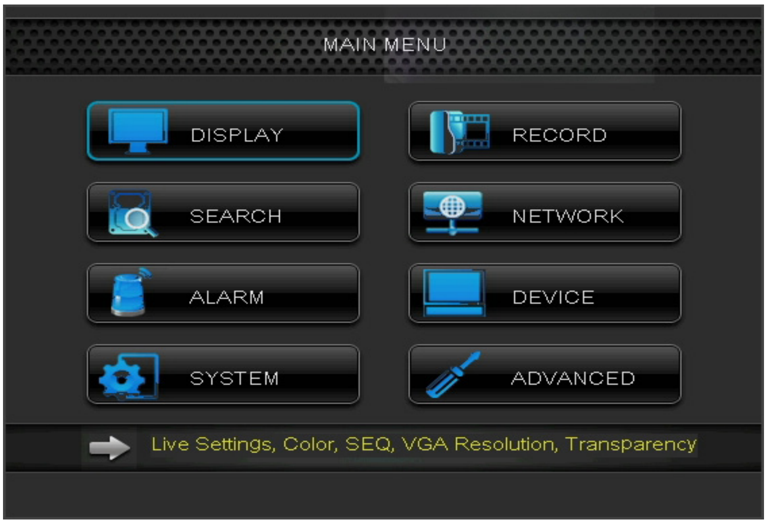
Enter Password

For system security, we suggest you change the password on DVR to protect your privacy.

1 In the preview mode, right-click on the mouse to display the Pop-up menu.


MainMenu
REC

2 Select **Main Menu** > **SYSTEM**.

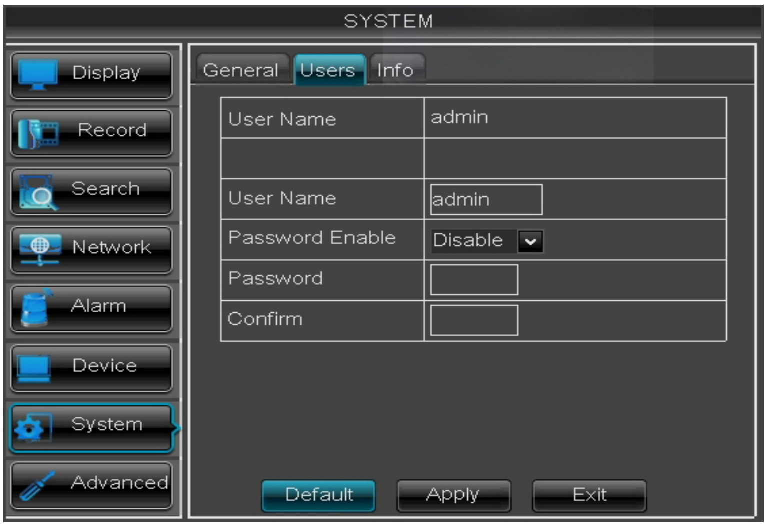

MAIN MENU
DISPLAY
RECORD
SEARCH
NETWORK
ALARM
DEVICE
SYSTEM
ADVANCED

Live Settings, Color, SEQ, VGA Resolution, Transparency

3 Click **Users** tab.

4 Click **Edit**.

5 If you want to modify the user name, enter desired name in **User Name**.



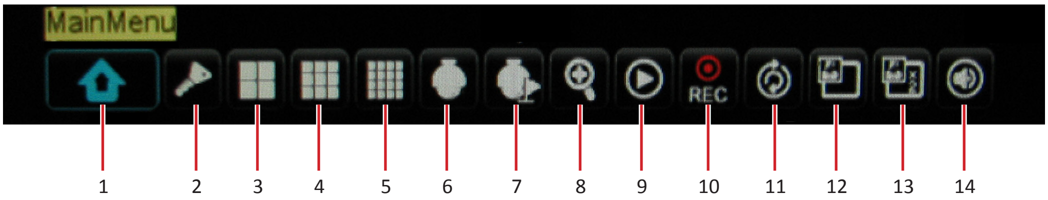
User Name	admin
User Name	admin
Password Enable	Disable
Password	
Confirm	

6 Click the **Password** box to enter the password. Then, click **Apply**.

7 Click **OK**.

3.6.4 Pop-up Menu

With the Pop-up menu, you can access to the main menu and other common features. To bring up the Pop-up Menu, click on the right mouse button or press the **MENU** button on the remote control. The available Pop-up menu items vary depending on the current setting or operation.

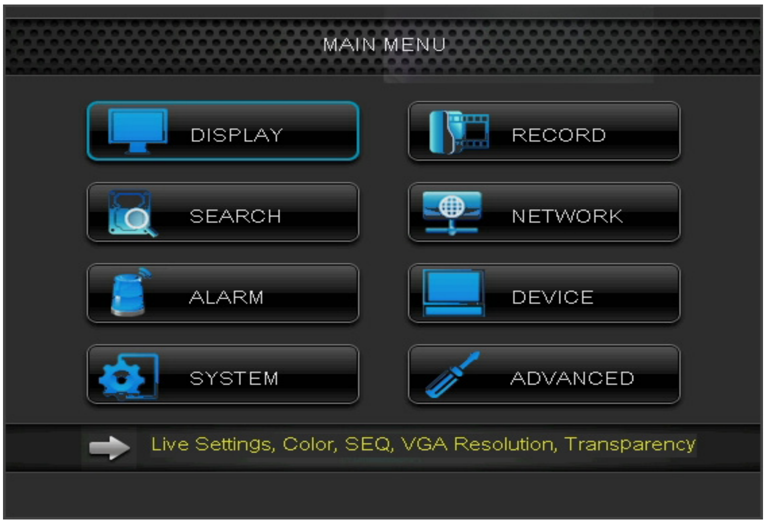


No.	Connector	Description
1	Main Menu	Access the OSD menu and adjust the DVR settings.
2	Lock	Lock access to enter the OSD menu. You need to type the user name and password before entering the OSD menu. See page 30.
3	View 4	Switch to a 4-window display. See page 34.
4	View 9	Switch to a 9-window display.
5	View 16	Switch to a 16-window display.
6	PTZ	Use the PTZ control. See page 36.
7	Start / Stop Cruise	Start/stop cruise of the PTZ camera. See page 37.
8	Zoom	Enable zoom. See page 37.
9	Record Search	Search for recorded videos to play back. See page 45.
10	Start / Stop Record	Start/stop manual recording. See page 38.
11	Start / Stop Rotate	Start/stop rotation of channel display. See page 35.
12	PIP 1x1	View one channel in full screen with another channel enclosed in a small window. See page 34.
13	PIP 1x2	View one channel in full screen with two other channels enclosed in small windows.
14	Audio	Turn off or turn on the audio.

3.6.5 On Screen Display (OSD) menu

You can access the OSD menu by one of the following ways:

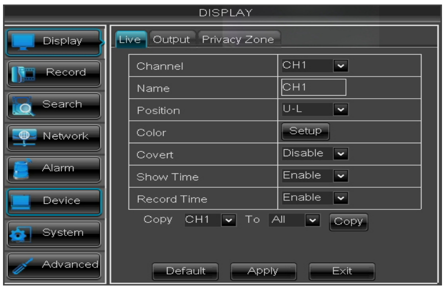
- Right-click on the mouse and select **Main Menu**.
- Press the **MENU** button on the remote control, then select **Main Menu**
- Press the **Menu** key on the front panel, then select **Main Menu**.


MAIN MENU
DISPLAY
RECORD
SEARCH
NETWORK
ALARM
DEVICE
SYSTEM
ADVANCED

Live Settings, Color, SEQ, VGA Resolution, Transparency

Submenu items:

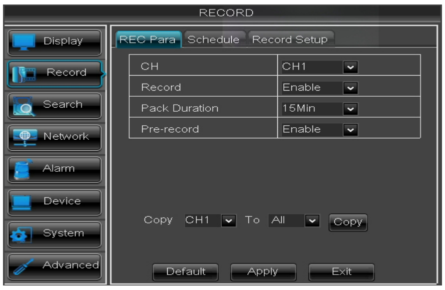
DISPLAY


DISPLAY
Display
Record
Search
Network
Alarm
Device
System
Advanced
Live
Output
Privacy Zone
Copy
Default
Apply
Exit

Channel	CH1
Name	CH1
Position	U-L
Color	Setup
Covert	Disable
Show Time	Enable
Record Time	Enable

Copy CH1 To All

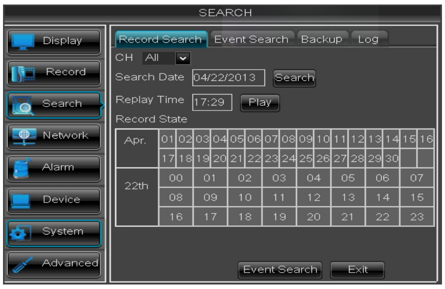
RECORD


RECORD
Display
Record
Search
Network
Alarm
Device
System
Advanced
REC Para
Schedule
Record Setup
Copy
Default
Apply
Exit

CH	CH1
Record	Enable
Pack Duration	15Min
Pre-record	Enable

Copy CH1 To All

SEARCH


SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
Search
Play
Event Search
Exit

CH All

Search Date 04/22/2013

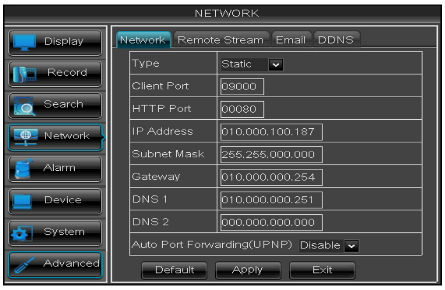
Replay Time 17:29

Record State

Apr.	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24	25	26	27	28	29	30		

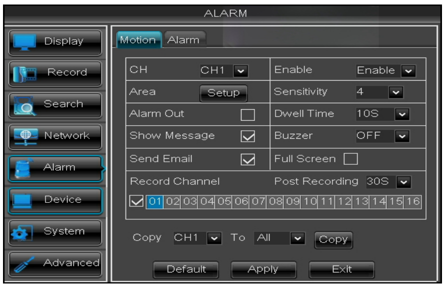
22th	00	01	02	03	04	05	06	07
	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23

NETWORK


NETWORK
Display
Record
Search
Network
Alarm
Device
System
Advanced
Network
Remote Stream
Email
DDNS
Default
Apply
Exit

Type	Static
Client Port	09000
HTTP Port	00080
IP Address	010.000.100.187
Subnet Mask	255.255.000.000
Gateway	010.000.000.254
DNS 1	010.000.000.251
DNS 2	000.000.000.000
Auto Port Forwarding(UPNP)	Disable

ALARM

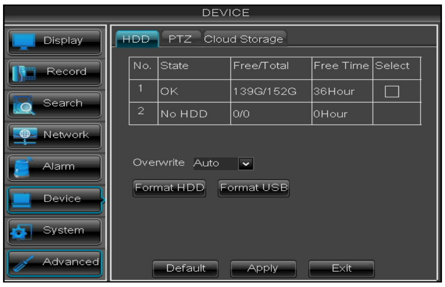

ALARM
Display
Record
Search
Network
Alarm
Device
System
Advanced
Motion
Alarm
Copy
Default
Apply
Exit

CH	CH1	Enable	Enable
Area	Setup	Sensitivity	4
Alarm Out	☐	Dwell Time	10S
Show Message	☑	Buzzer	OFF
Send Email	☑	Full Screen	☐
Record Channel		Post Recording	30S

☑ 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Copy CH1 To All

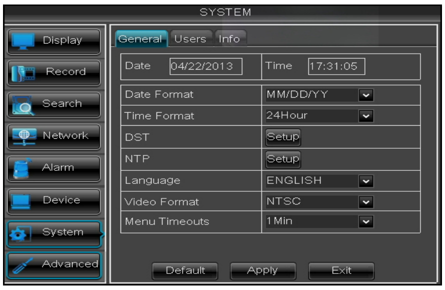
DEVICE


DEVICE
Display
Record
Search
Network
Alarm
Device
System
Advanced
HDD
PTZ
Cloud Storage
Format HDD
Format USB
Default
Apply
Exit

No.	State	Free/Total	Free Time	Select
1	OK	139G/152G	36Hour	☐
2	No HDD	0/0	0Hour	

Overwrite Auto

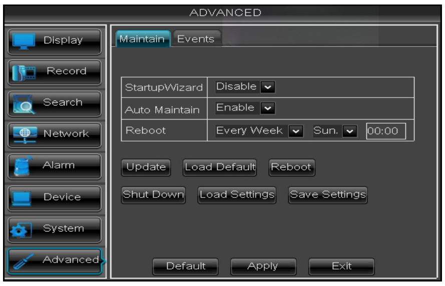
SYSTEM


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
Default
Apply
Exit

Date	04/22/2013	Time	17:31:05

Date Format	MM/DD/YY
Time Format	24Hour
DST	Setup
NTP	Setup
Language	ENGLISH
Video Format	NTSC
Menu Timeouts	1Min

ADVANCED

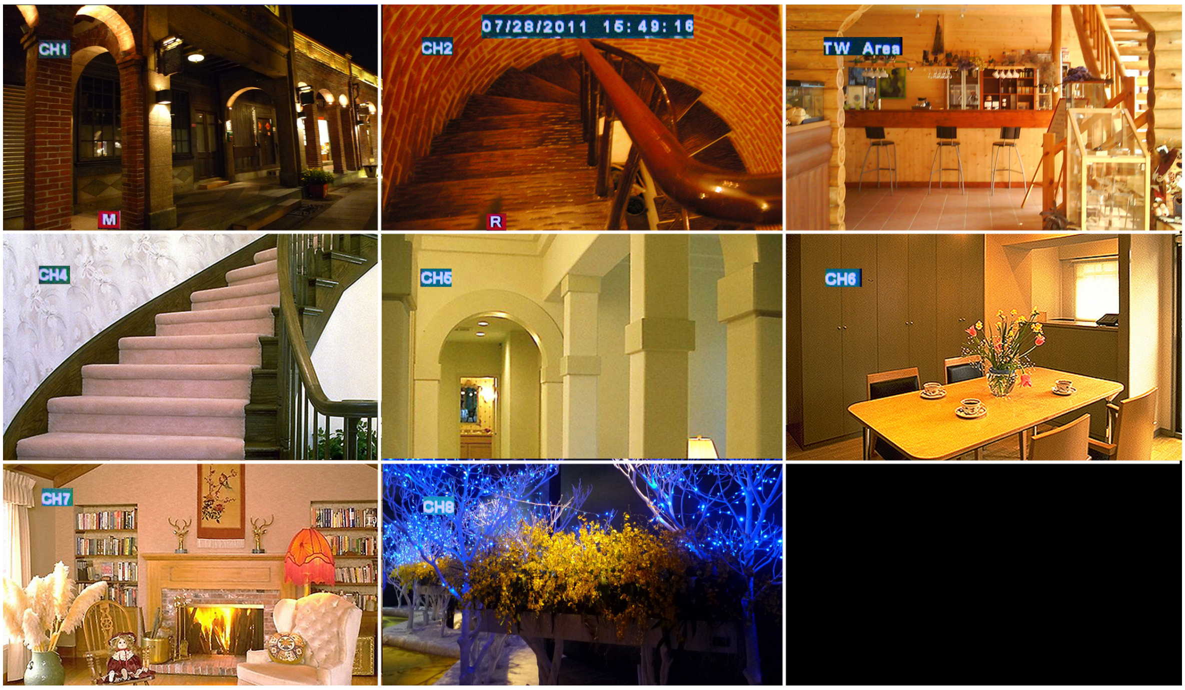

ADVANCED
Display
Record
Search
Network
Alarm
Device
System
Advanced
Maintain
Events
Update
Load Default
Reboot
Shut Down
Load Settings
Save Settings
Default
Apply
Exit

StartupWizard	Disable
Auto Maintain	Enable
Reboot	Every Week Sun. 00:00

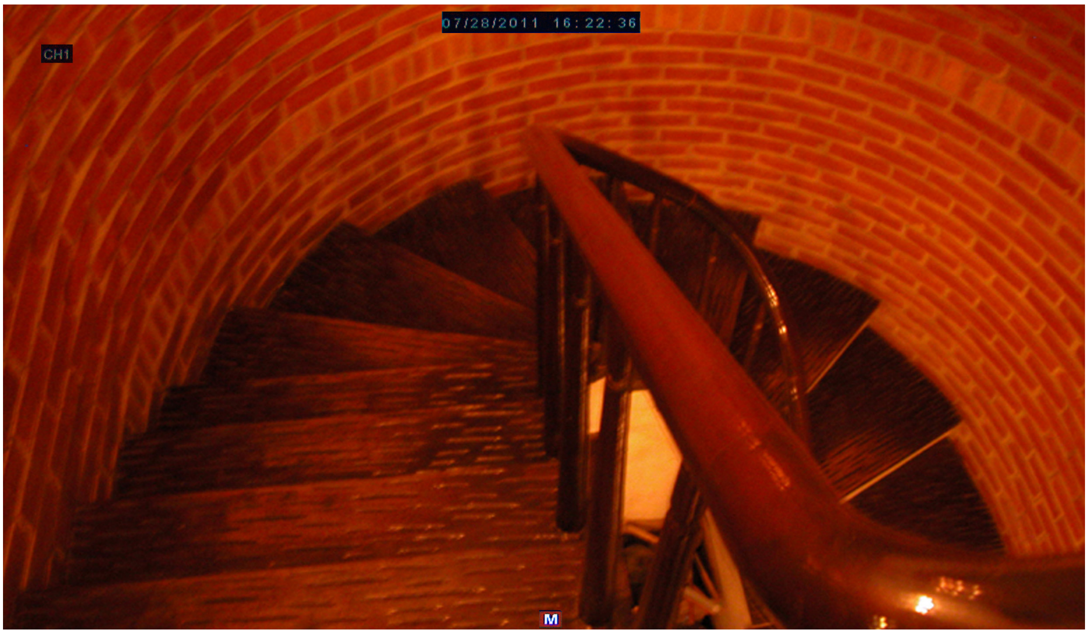
3.7 Screen Modes

3.7.1 Live View

By default, all channels are displayed on the screen in grid form.


CH1
M
07/28/2011 15:49:16
CH2
R
TW Area
CH4
CH5
CH6
CH7
CH8

To view the live image of any channel on full screen, simply double-click the left mouse button. Double-click the left mouse button again to return to the window-display of all cameras.


07/28/2011 16:22:36
CH1
M

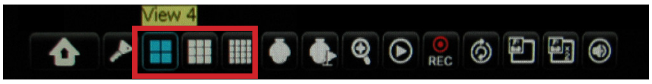
3.7.2 Split Mode

You can customize the 16 channels to be displayed separately on a 4-window or 9-window display or show all 16 channels on the screen.

There are 3 split mode options:

1 In the preview mode, right-click on the mouse to display the pop-up menu.

2 Select one of the following options:



- **View 4**: Click this icon to view 4 channels at a time. Click again to view the next 4 channels and so on.
- **View 9**: Click this icon to view 9 channels at a time. Click again to view the next batch of channels.
- **View 16**: Click this icon to view all 16 channels at a time.

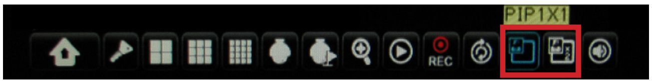
Note:
Options to split windows may vary depending on the DVR model. Split Windows option is not available when **View Setup** is enabled (see "4.1.2 Output Settings" on page 40).

3.7.3 Picture-in-Picture (PIP) Mode

With Picture-in-Picture (PIP) mode, you can watch two more channels to be simultaneously displayed on the first channel live preview.

1 In the preview mode, right-click on the mouse to display the Pop-up menu.

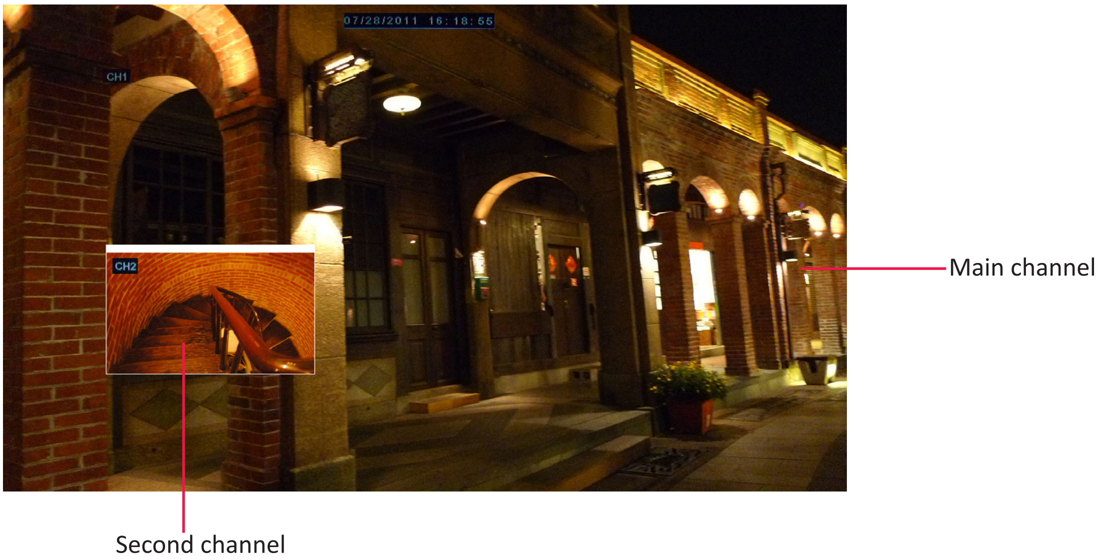
2 Select one of the following options:



- **PIP1X1**: Click this icon to view another channel that will appear a mini-window frame on top of the main channel display.
- **PIP1X2**: Click this icon to view two more channels that will appear on two mini-window frames on top of the main channel display.

3 To move the mini-window around the main screen, click and drag it to a new position.

For example: PIP 1X1 mode



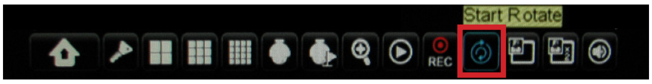
3.7.4 Rotate View

With this function, the system will automatically rotate the display through all the channels and split window display.

To enable rotate view:

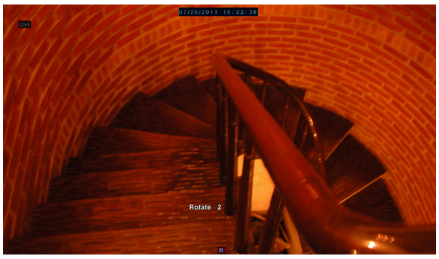
1 In the preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Start Rotate**.

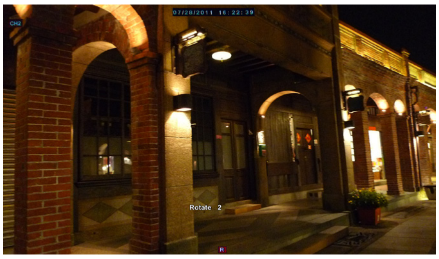


The rotating display starts. By default, each display switches at 5 seconds interval. You can change the switch rotate time interval in **Display** menu (see “4.1.2 Output Settings” on page 40).

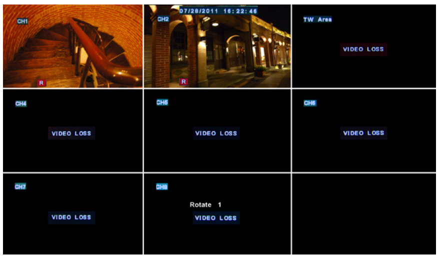
An example of the screen display rotation, as follows (8-channel DVR with 2 available channels):



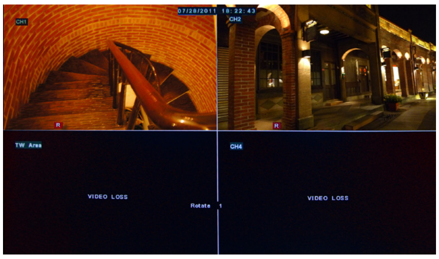
Full screen
(First channel)



Full screen
(Second channel)



8-window display



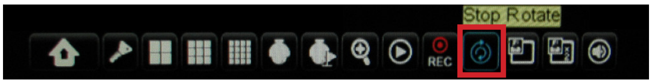
4-window display

Note:
The displayed screens vary depending on the available channels.

To disable rotate view:

1 Right-click on the mouse to display the Pop-up menu.

2 Select **Stop Rotate**.



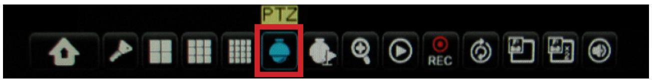
Note:
Rotate function is not available when **View Setup** is enabled (see “4.1.2 Output Settings” on page 40).

3.8 Using PTZ Controls

If you are using a PTZ speed dome camera, you can configure the PTZ control settings.

1 In the preview mode, right-click on the mouse to display the Pop-up menu.

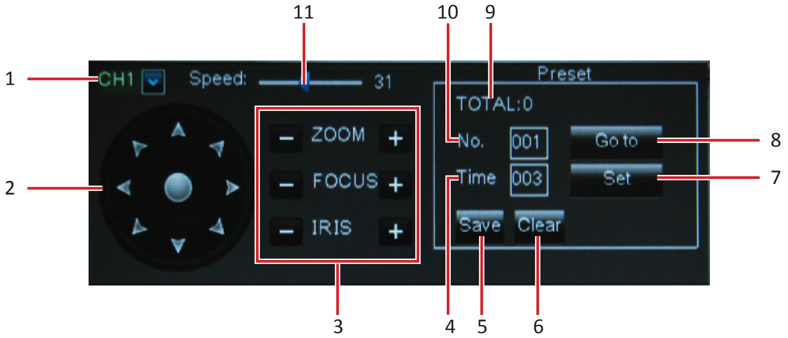
2 Select **PTZ**.



Note:
This option is not available if the PTZ camera is in Cruise mode. See “4.6.2 PTZ Setup” on page 61.

3 The PTZ control panel appears on the screen.

Note:
To change the PTZ settings, see “4.6.2 PTZ Setup” on page 61.



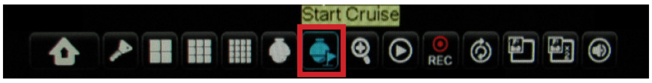
No.	Icon	Item	Function
1	CH1	Channel Select	Click to select the channel of the PTZ camera.
2		Pointer pan	Click the direction arrow to select the direction of the PTZ camera. Click the middle icon to switch to auto pan mode.
3	− ZOOM +	Zoom	Click to zoom in/out.
	− FOCUS +	Focus	Click to adjust the focus.
	− IRIS +	Iris	Click to adjust the iris setting.
4	-	Time	Set a preset time.
5	Save	Save	Click to save the settings and preset points.
6	Clear	Clear	Click to delete the selected preset.
7	Set	Set Preset Point	Click to set a specific preset point on a PTZ camera. **Note:** You can set up to 255 preset bits for the DVR. However, the actual preset quantity varies depending on the PTZ camera performance.
8	Go to	Go to Preset Point	Click to go to a specific preset point.
9	-	Total	Display the total of preset bit.
10	-	No.	Set a preset point.
11	Speed: 31	Speed	Click to adjust the speed.

3.8.1 Cruise Mode

Use the Start Cruise function to allow the PTZ camera to start cruising.

1 In the preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Start Cruise**.



To disable cruise:

1 Right-click on the mouse to display the Pop-up menu.

2 Select **Stop Cruise**.

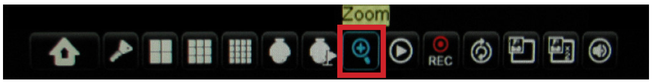
3.9 Zoom

With this function, you can check the details of the live display on the zoomed section.

1 Double-click the mouse button on a channel to view it on full screen.

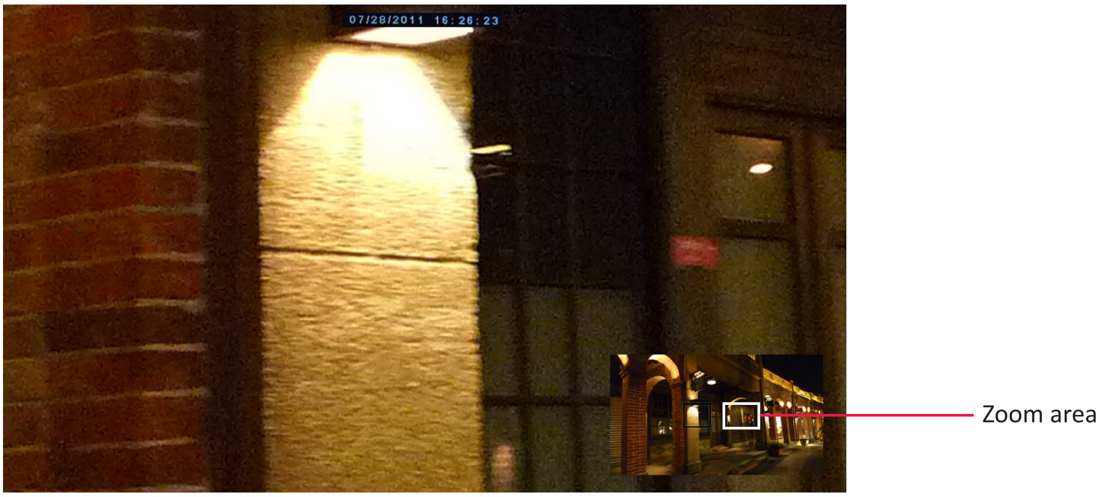
2 Right-click on the mouse to display the Pop-up menu.

3 Select **Zoom**.



4 In zoom mode, click and drag the left mouse button to frame an area on the screen that you want to zoom in.

The selected location will be enlarged and displayed as full screen.



Note:
To pan another area on the screen, simply click and drag the frame on the mini-window display.

5 To exit zoom mode, click the right button twice. It returns to live image display mode.

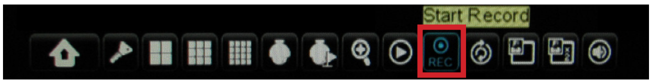
3.10 Manual Recording

With this function, you can manually record the video. The system will continuously record the video until you manually stop the recording.

To enable manual recording:

1 In the preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Start Record**.



The video recording starts.

To stop the manual recording:

1 Right-click on the mouse to display the Pop-up menu.

2 Select **Stop Record**.

The video recording stops.

Chapter 4: Using the DVR

4.1 Setting the Display

With the **DISPLAY** menu, you can adjust the display settings such as channel type, window position, color, enable live time, set the privacy zone, and other settings. The **DISPLAY** menu is divided into three sections:

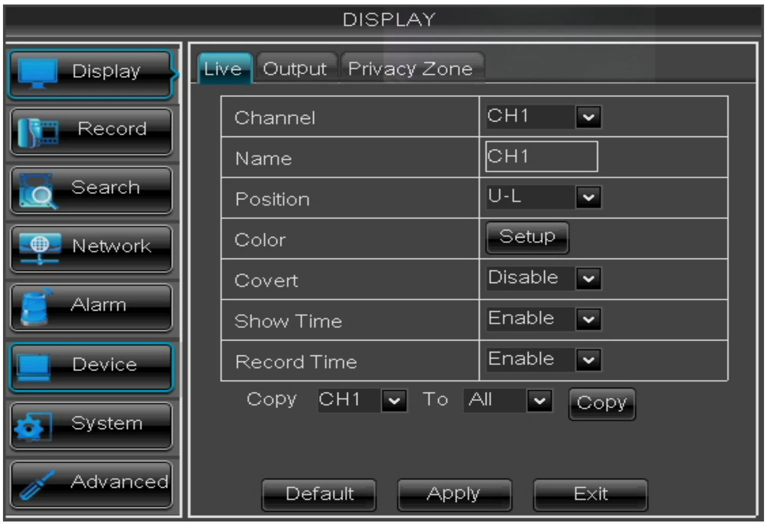
- **Live**: To configure how you want the channel to appear on the live view screen.
- **Output**: To configure the video settings.
- **Privacy Zone**: To mask areas on your camera as private zones.

4.1.1 Live Settings

1 In the preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **DISPLAY**.

3 Modify the necessary settings:



Channel	CH1
Name	CH1
Position	U-L
Color	Setup
Covert	Disable
Show Time	Enable
Record Time	Enable

Copy CH1 To All

Menu item	Description
Channel	Select the channel that you want to configure.
Name	Enter desired channel title to be displayed on the display screen.
Position	Set the title position on the screen. Example: U-L (upper left)
Color	Adjust image hue, brightness, contrast, and saturation settings. Select **Setup** to enter the Color submenu. Drag the slider bar to adjust the color item setting.
Covert	Select **Enable** to hide the channel from being displayed on the screen. Select **Disable** to display the channel in live view.
Show Time	Hide or display the current time while viewing the channel in live view.
Record Time	Hide or display the recording time while recording.
Copy To	Copy the current settings to all channels or one specific channel. Click the arrow to select an option and then click **Copy**.

4 After all settings are complete, click **Apply**.

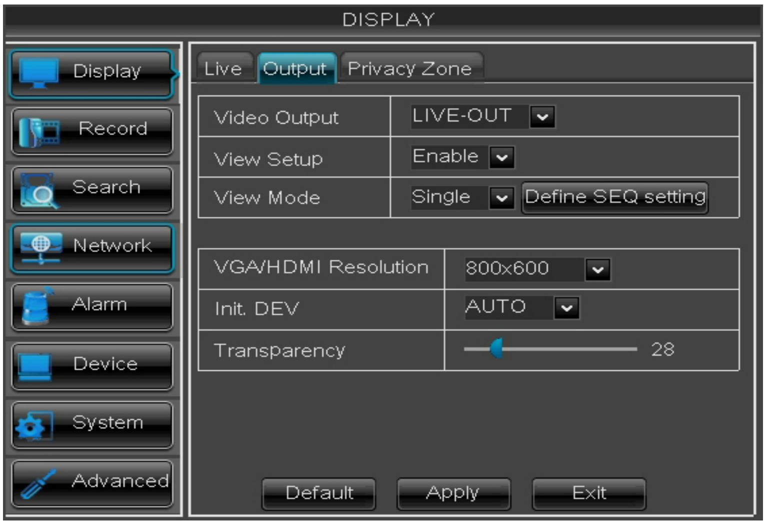
5 When data saving is complete, click **OK**.

4.1.2 Output Settings

1 In the preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **DISPLAY**, then select the **Output** tab.

3 Modify the necessary settings:


DISPLAY
Display
Record
Search
Network
Alarm
Device
System
Advanced
Live
Output
Privacy Zone
Define SEQ setting
Default
Apply
Exit

Video Output LIVE-OUT
View Setup Enable
View Mode Single
VGA/HDMI Resolution 800x600
Init. DEV AUTO
Transparency 28

Menu item	Description
Video Output	To set the video output setting of the main monitor used for live view display.
View Setup	Select **Enable** to enable view setup. **Note:** When **View Setup** is enabled, **Split Windows** function is not available (see "3.7.2 Split Mode" on page 34).
View Mode	Select how you want to split the windows, options are: **Single**, **Quad**, **Nine**, **Sixteen**. **Note:** **Sixteen** option is only available on 16-channel model.
Define SEQ setting	Click **Define SEQ setting** to set the order of how the channels appear.
VGA/HDMI Resolution	Select the output resolution.
Init. DEV (Initial Device)	Select where you want to display the OSD menu (BNC Video Out, HDMI, or Auto Detection).
Transparency	Slide the bar to adjust the transparency of windows.

4 After all settings are complete, click **Apply**.

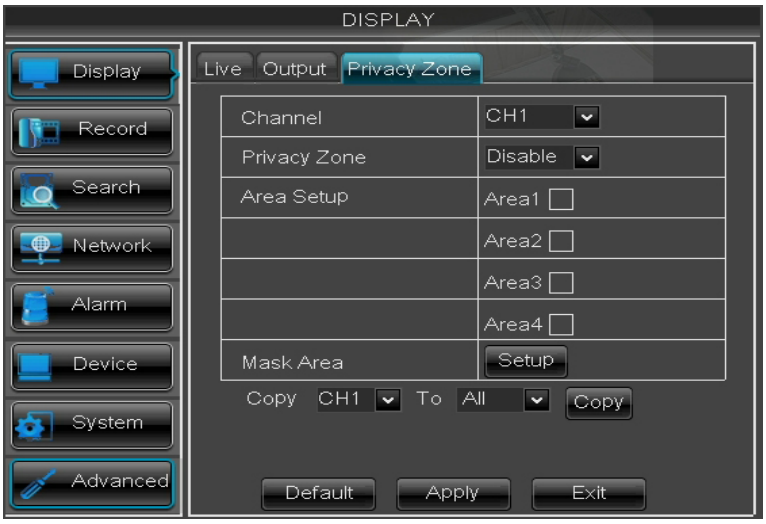
5 When data saving is complete, click **OK**.

4.1.3 Privacy Zone Settings

You can mask up to 4 areas to hide it from being viewed on the screen.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **DISPLAY**, then select the **Privacy Zone** tab.



DISPLAY
Display
Record
Search
Network
Alarm
Device
System
Advanced
Live
Output
Privacy Zone
Default
Apply
Exit

Channel CH1

Privacy Zone Disable

Area Setup Area1 ☐

Area2 ☐

Area3 ☐

Area4 ☐

Mask Area Setup

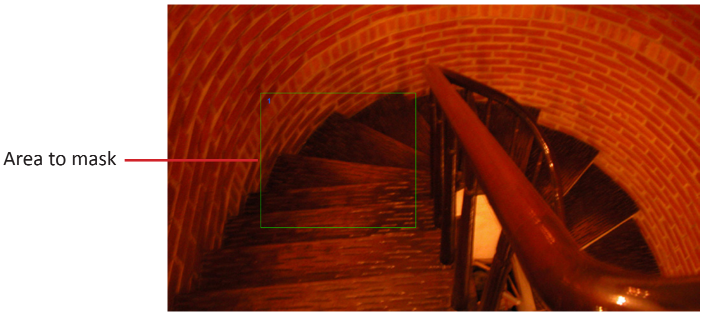
Copy CH1 To All Copy

3 In **Channel**, select the channel that you want to set the privacy.

4 In **Privacy Zone**, select **Enable**.

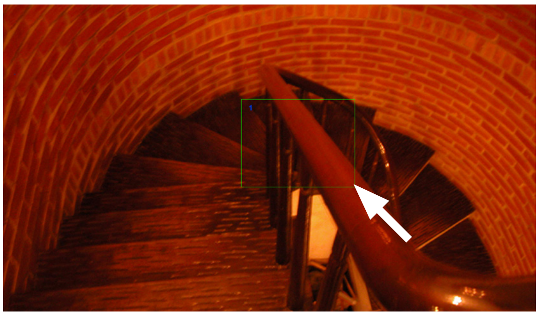
5 In **Area Setup**, check the number of areas to mask. You can check **Area 1** to **Area 4** to create 4 masked areas.

6 Click **Setup**. The green box indicates the area for masking.



Area to mask

7 Drag the box to the area that you want to mask. You can resize the box by dragging the edges to desired size.



Note:
The above illustration is an example of one checked area (Area 1). The number of green boxes depends on how many areas you checked in **Area Setup**.

8 Click the right mouse button to close the Select Mask screen.

07/28/2011 16:22:36
CH1
Masked area

9 After all settings are complete, click **Apply**.

10 When data saving is complete, click **OK**.

> **« TIP »**
> To copy the privacy zone setting to other channels, select the channel(s) in **Copy To**, then click **Copy**.

4.2 Record Setup

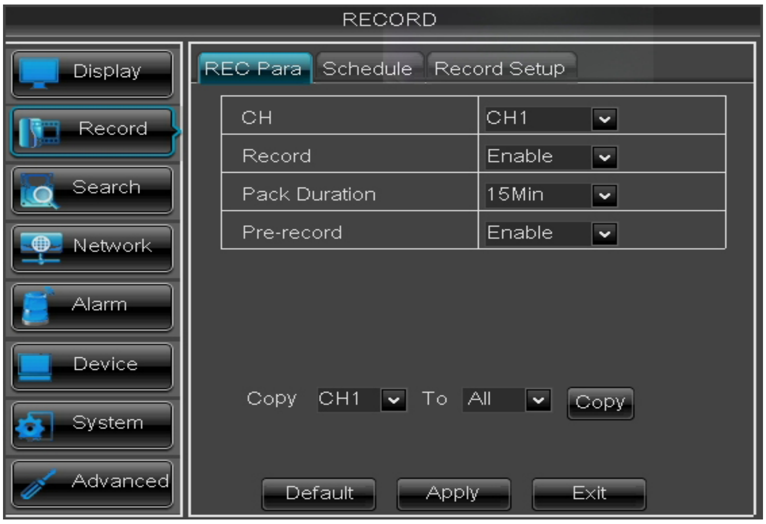
With **RECORD** menu, you can customize the recording settings, set the recording schedule and framerate.

4.2.1 Record Parameter

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **RECORD**.

3 Modify the necessary settings.


RECORD
Display
Record
Search
Network
Alarm
Device
System
Advanced
REC Para
Schedule
Record Setup
Copy
Default
Apply
Exit

CH: CH1
Record: Enable
Pack Duration: 15Min
Pre-record: Enable
Copy CH1 To All

Menu item	Description
CH	Select the channel that you want to configure.
Record	Enable/Disable record mode.
Pack Duration	Set the elapsed time per recording (15 Min/30 Min/45 Min/60 Min).
PreRecord	Enable/Disable recording prior to motion detection recording is triggered.
Copy To	Copy the current settings to all channels or one specific channel.

4 After all settings are complete, click **Apply**.

5 When data saving is complete, click **OK**.

4.2.2 Schedule Recording

1 In preview mode, right-click on the mouse to display the Pop-up menu.

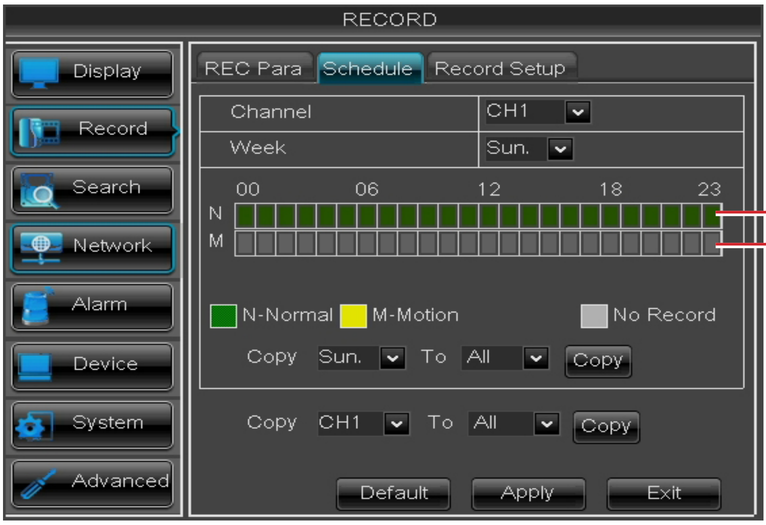
2 Select **Main Menu** ⌂ > **RECORD**, then select the **Schedule** tab.

3 On **Channel**, select the channel you want to set the schedule.

4 On **Week**, select the days of the week to implement the schedule.

5 The number labels on top of the grid indicates the time of the day. Click a box to mark the schedule.

(4-Channel/8-Channel Schedule)


RECORD
Display
Record
Search
Network
Alarm
Device
System
Advanced
REC Para
Schedule
Record Setup
00
06
12
18
23
N
M
🟩 N-Normal
🟨 M-Motion
⬜ No Record
Copy
Sun.
To
All
Copy
Copy
CH1
To
All
Copy
Default
Apply
Exit

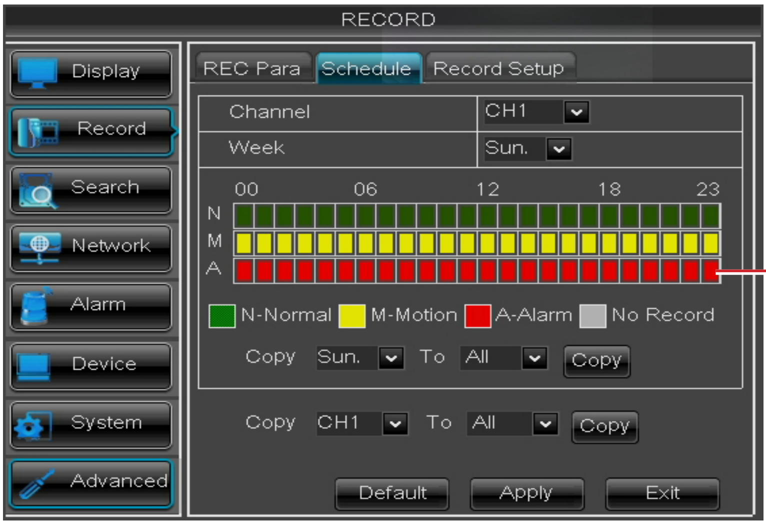
Channel CH1

Week Sun.

Slot for Normal recording

Slot for Motion recording

(16-Channel Schedule)


RECORD
Display
Record
Search
Network
Alarm
Device
System
Advanced
REC Para
Schedule
Record Setup
00
06
12
18
23
N
M
A
🟩 N-Normal
🟨 M-Motion
🟥 A-Alarm
⬜ No Record
Copy
Sun.
To
All
Copy
Copy
CH1
To
All
Copy
Default
Apply
Exit

Channel CH1

Week Sun.

Slot for Alarm recording

- **Normal Recording**: When the time slot is marked green, the channel performs normal recording for that time slot.
- **Motion Recording**: When the time slot is marked yellow, the channel records only when motion is detected during that time slot.
- **Alarm Recording** (for 16-channel only): When the time slot is marked red, the channel records only when the alarm is triggered during that time slot.
- **No Record**: A time slot marked gray has no recording schedule.

6 To remove a marked schedule, click the box again. The box turns gray.

7 After all settings are complete, click **Apply**.

« TIP »

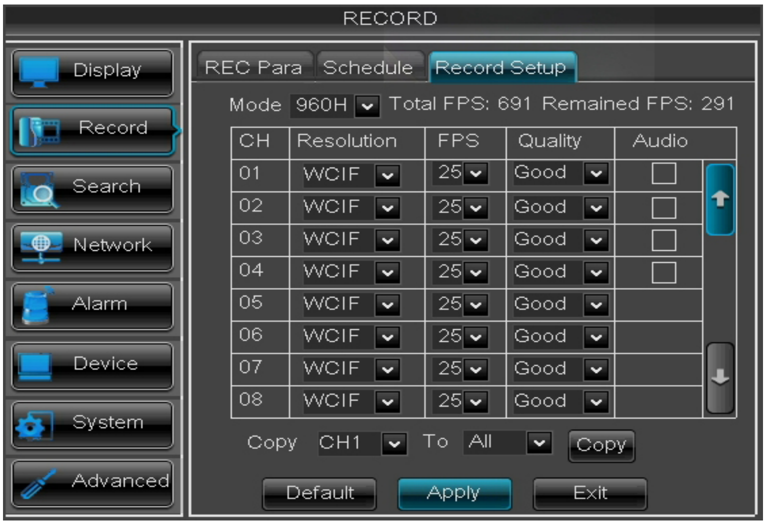
- To copy the current settings to other days, select the day, then click **Copy**.
- To copy the current settings to other channels, select the channel, then click **Copy**.

8 When data saving is complete, click **OK**.

4.2.3 Record Setup

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **RECORD**, then select the **Record Setup** tab. The Framerate settings are displayed on a table.



Mode 960H Total FPS: 691 Remained FPS: 291

CH	Resolution	FPS	Quality	Audio
01	WCIF	25	Good	☐
02	WCIF	25	Good	☐
03	WCIF	25	Good	☐
04	WCIF	25	Good	☐
05	WCIF	25	Good	
06	WCIF	25	Good	
07	WCIF	25	Good	
08	WCIF	25	Good	

Copy CH1 To All Copy

3 On **Mode**, select the type of record mode. Options are: **D1** or **960H**.

Note:
If the record mode setting is set to 960H, it is recommended to use a 600 TVL or higher resolution camera.

4 Select the channel and adjust the corresponding settings such as **Resolution**, **FPS**, and **Quality**.

Note:
If the frame rate set is over the system limitation, a message is displayed on the screen.

5 Check the **Audio** box to enable audio.

6 After all settings are complete, click **Apply**.

7 When data saving is complete, click **OK**.

« TIP »
To copy the record setup setting to other channels, select the channel(s) in **Copy To**, then click **Copy**.

4.3 Searching Videos

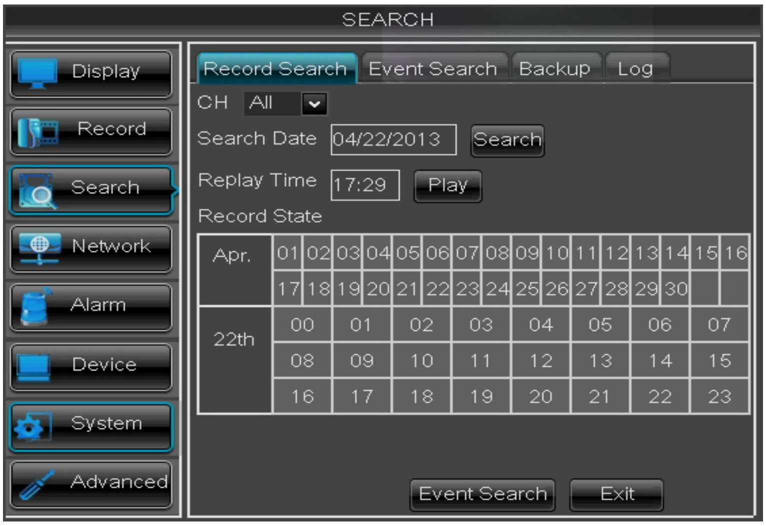
4.3.1 Searching and Playing Videos

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SEARCH**.

3 On **CH**, select the channel where you want to search the recorded video, or select **All** to search all channels.

4 Click the **Search Date** box and specify the date where you want to search the recorded video.



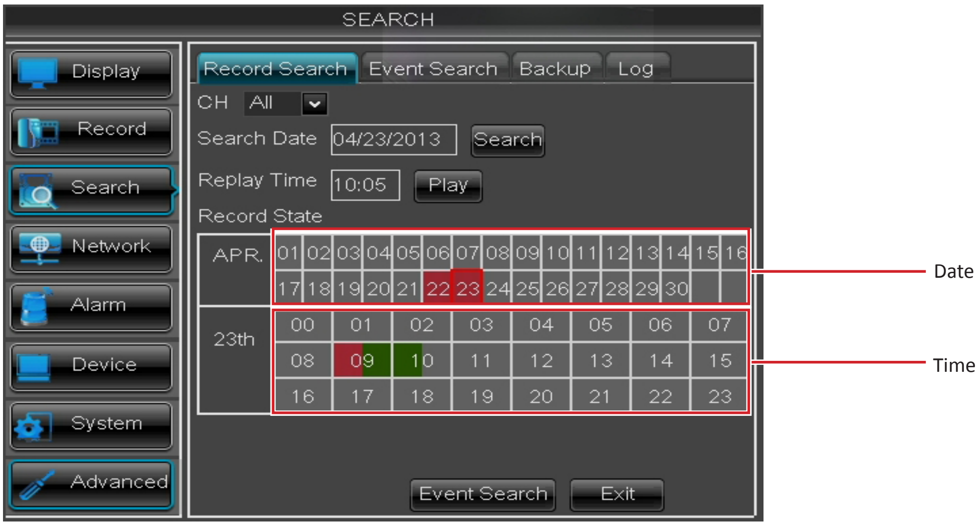
CH All

Search Date 04/22/2013

Replay Time 17:29

SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
Search
Play
Record State
Apr.
22th
Event Search
Exit

5 Click **Search**. The time slot of the recorded videos are marked on the **Record State** table. Green box means normal recording while a red box means alarm recording.



CH All

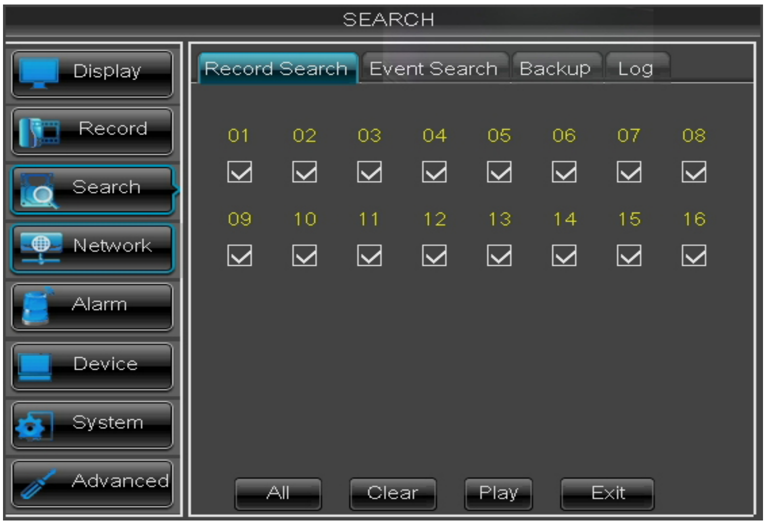
Search Date 04/23/2013

Replay Time 10:05

SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
Search
Play
Record State
APR.
23th
Event Search
Exit
Date
Time

6 Click a time slot that you want to play.

7 Select the channel(s) to play simultaneously.


SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
01 02 03 04 05 06 07 08
☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑
09 10 11 12 13 14 15 16
☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑
All
Clear
Play
Exit

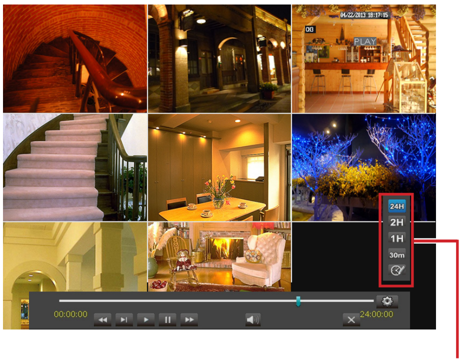
« TIP »

- To select all channels, click **All**.
- To deselect all channels, click **Clear**.

8 Click **Play** to start playback.

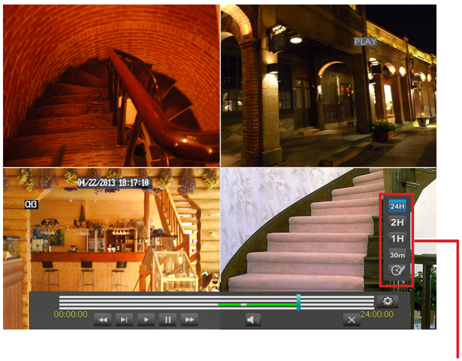
The playback screen varies depending on the number of channels you selected for simultaneous playback. Examples below:

Simultaneous Playback of 8 Channels


PLAY
24H
2H
1H
30m
00:00:00
24:00:00

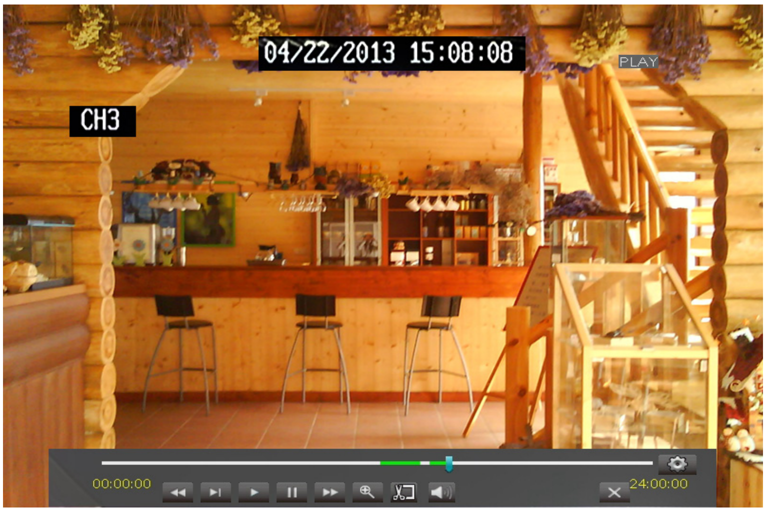
Playback Time Frame

Simultaneous Playback of 4 Channels


PLAY
04/22/2013 18:17:10
CH3
24H
2H
1H
30m
00:00:00
24:00:00

Playback Time Frame

9 To play in full screen, click a channel.


04/22/2013 15:08:08
PLAY
CH3
00:00:00
24:00:00

10 Click the respective button to pause, rewind, fast forward, or mute the sound. To specify the playback time frame, click the ⚙ icon and select one of the available options.

Options: 24 Hours, 2 Hours, 1 Hour, 30 Minutes, and Customize time frame (Click the icon (), and the icon turns red (). Click on the time bar where you desire to start, and click on the time bar again where you desire to end.)

11 To stop the video playback, click **X**.

4.3.2 Trimming Videos

1 Plug a USB device into the USB port of the DVR.

2 In preview mode, right-click on the mouse to display the Pop-up menu.

3 Select **Main Menu** > **SEARCH**.

4 On **CH**, select the channel where you want to search the recorded video, or select **All** to search all channels.

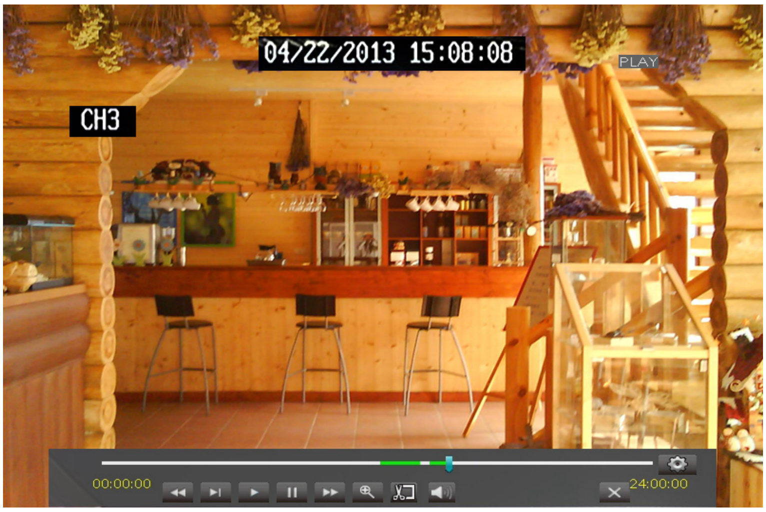
5 Click the **Search Date** box and specify the date where you want to search the recorded video.

6 Click **Search**.

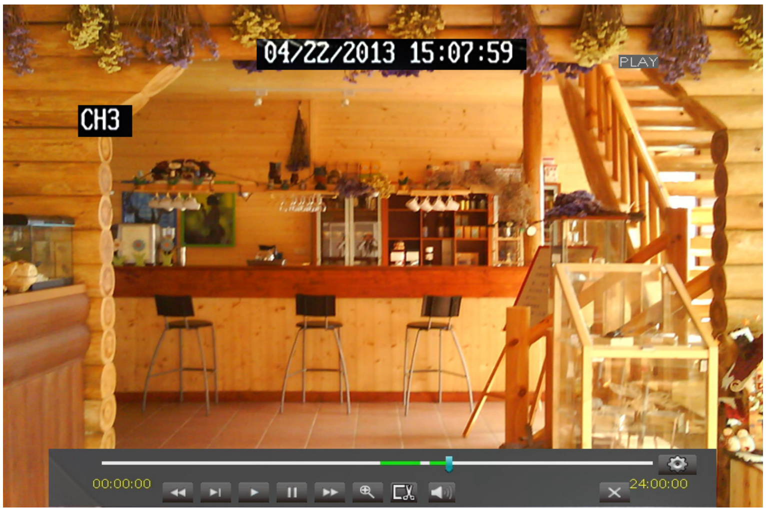
7 Select the channel(s) to play simultaneously and click **Play** to start playback.

8 To play in full screen, click a channel.

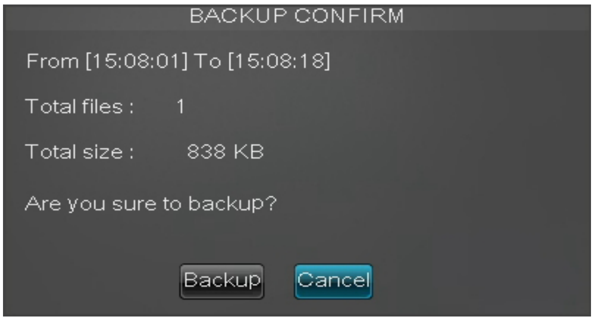
9 While playing video in full screen, click the icon to start trimming the video clip.



10 To stop trimming the video clip, click the icon.



11 A confirmation message appears on the screen, select **Backup** to save the file.



BACKUP CONFIRM

From [15:08:01] To [15:08:18]

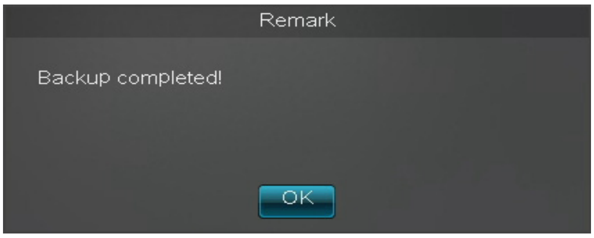
Total files : 1

Total size : 838 KB

Are you sure to backup?

Backup
Cancel

12 When backup is complete, click **OK** to close the Backup Status screen.



Remark

Backup completed!

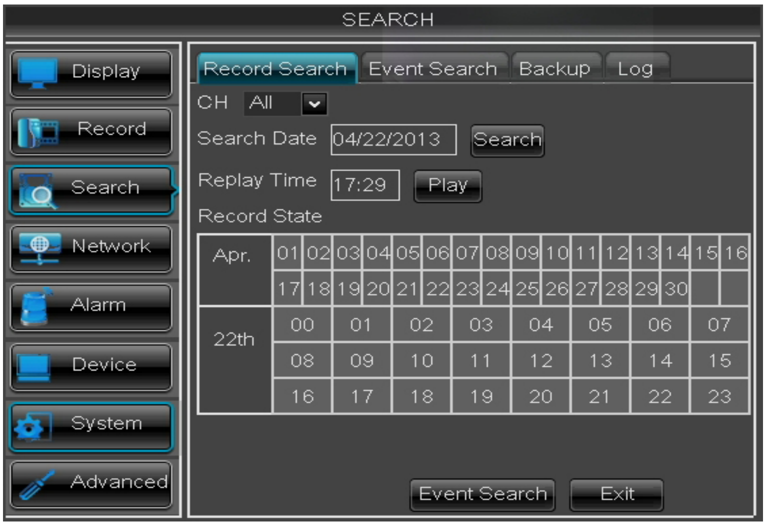
Note:
Do not remove the USB device while file transferring is in progress.

Replaying Videos by Recording Date and Time

If you are sure of the recording date and time, you can directly specify the recording date and time to replay the video without searching.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SEARCH**.



SEARCH

CH: All

Search Date: 04/22/2013

Replay Time: 17:29

Record State

Apr.																
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24	25	26	27	28	29	30		

22th								
	00	01	02	03	04	05	06	07
	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23

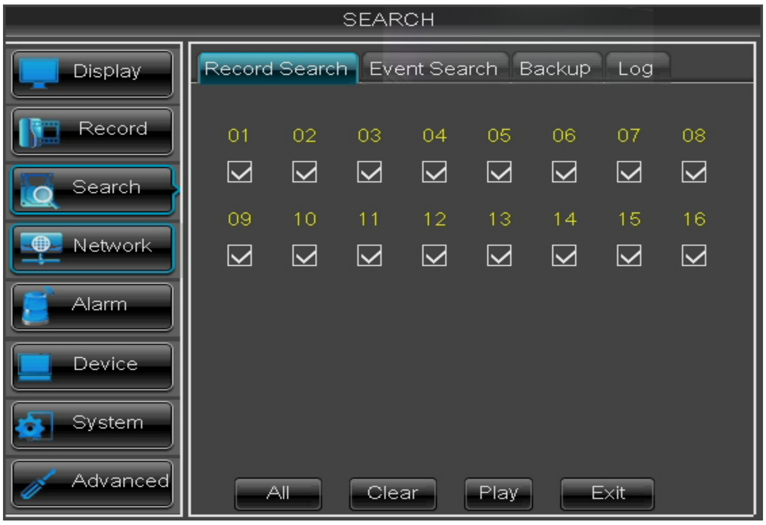
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
Search
Play
Event Search
Exit

3 On **Search Date,** specify the recording date.

4 On **Replay Time**, specify the starting time of the recording to replay.

5 Click **Play**.

6 Select the channel(s) to play simultaneously.


SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
01 ☑
02 ☑
03 ☑
04 ☑
05 ☑
06 ☑
07 ☑
08 ☑
09 ☑
10 ☑
11 ☑
12 ☑
13 ☑
14 ☑
15 ☑
16 ☑
All
Clear
Play
Exit

« TIP »

- To select all channels, click **All**.
- To deselect all channels, click **Clear**.

7 Click **Play** to start playback.

4.3.3 Searching Videos by Event

1 In preview mode, right-click on the mouse to display the Pop-up menu.

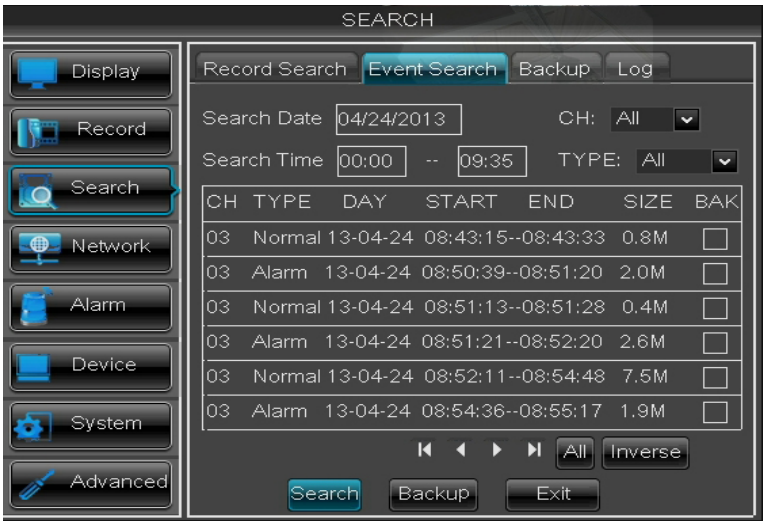
2 Select **Main Menu** ⌂ > **SEARCH**, click the **Event Search** tab.

3 On **Search Date,** specify the recording date.

4 On **Search Time**, specify the starting time and the ending time to search for the event.

5 On **CH**, select the channel to search, or select **All** to search all channels.

6 On **TYPE**, select the type of recording to search. Options are: **All**, **Normal** or **Alarm**.


SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
All
Inverse
Search
Backup
Exit

Search Date 04/24/2013
CH: All
Search Time 00:00 -- 09:35
TYPE: All

CH	TYPE	DAY	START	END	SIZE	BAK
03	Normal	13-04-24	08:43:15	08:43:33	0.8M	☐
03	Alarm	13-04-24	08:50:39	08:51:20	2.0M	☐
03	Normal	13-04-24	08:51:13	08:51:28	0.4M	☐
03	Alarm	13-04-24	08:51:21	08:52:20	2.6M	☐
03	Normal	13-04-24	08:52:11	08:54:48	7.5M	☐
03	Alarm	13-04-24	08:54:36	08:55:17	1.9M	☐

7 Click **Search**. The recordings are listed on the table.

4.3.4 Backing up Videos

1 Plug a USB device into the USB port of the DVR.

2 In preview mode, right-click on the mouse to display the Pop-up menu.

3 Select **Main Menu** ⌂ > **SEARCH**, select the **Backup** tab.

4 On **Search Date,** specify the recording date.

5 On **Search Time**, specify the starting time and the ending time to filter the search.

6 On **CH**, select the channel to search, or select **All** to search all channels.

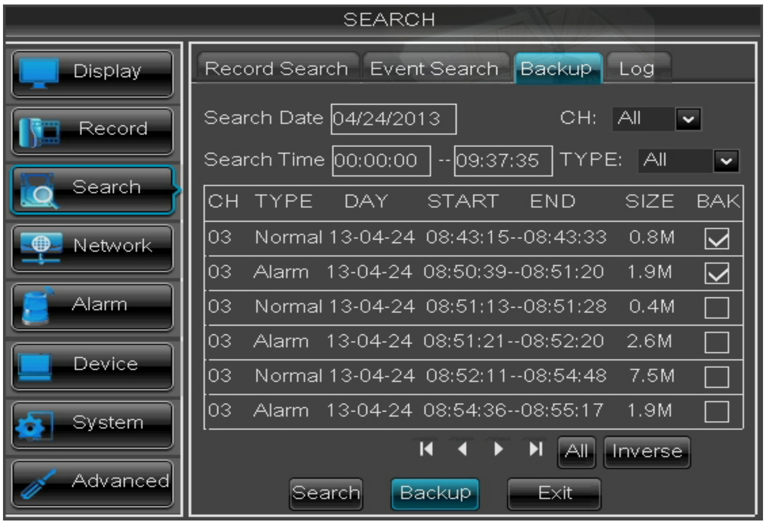
7 On **TYPE**, select the type of recording. Options are: **All**, **Normal** or **Alarm**.

8 To browse the list, click the control buttons ⏮ ◀ ▶ ⏭.

9 Select the **BAK** boxes of the recordings that you want to backup. A √ icon appears on the check box to indicate that the file has been selected.

« TIP »

- To select or deselect all check boxes, click **All**.
- To reverse the marked boxes, click **Inverse**.

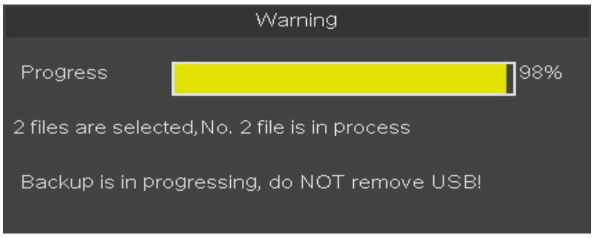

SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
⏮ ◀ ▶ ⏭
All
Inverse
Search
Backup
Exit

Search Date 04/24/2013 CH: All

Search Time 00:00:00 -- 09:37:35 TYPE: All

CH	TYPE	DAY	START END	SIZE	BAK
03	Normal	13-04-24	08:43:15--08:43:33	0.8M	☑
03	Alarm	13-04-24	08:50:39--08:51:20	1.9M	☑
03	Normal	13-04-24	08:51:13--08:51:28	0.4M	☐
03	Alarm	13-04-24	08:51:21--08:52:20	2.6M	☐
03	Normal	13-04-24	08:52:11--08:54:48	7.5M	☐
03	Alarm	13-04-24	08:54:36--08:55:17	1.9M	☐

10 Click **Backup**. The Backup Status screen appears.


Warning
Progress
98%

2 files are selected,No. 2 file is in process

Backup is in progressing, do NOT remove USB!

11 When backup is complete, click **OK** to close the Backup Status screen.

Note:

Do not remove the USB device while file transferring is in progress.

4.3.5 Viewing and Exporting Log

1 Plug a USB device into the USB port of the DVR.

2 In preview mode, right-click on the mouse to display the Pop-up menu.

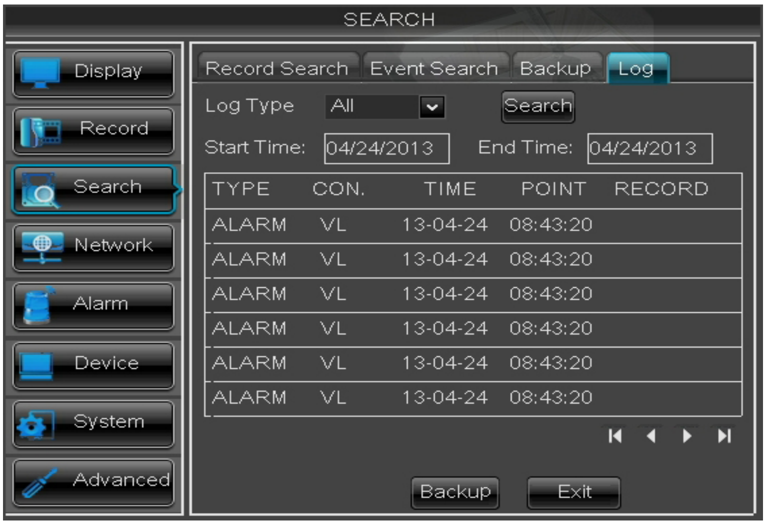
3 Select **Main Menu** > **SEARCH**, click the **Log** tab.

4 To view the log files, click **Log**.

5 On **Log Type**, select one of the log types (All/Alarm/Operation).

6 Specify the **Start Time** and **End Time** to filter the list.

7 Click **Search**. All related log files are displayed on the screen.


SEARCH
Display
Record
Search
Network
Alarm
Device
System
Advanced
Record Search
Event Search
Backup
Log
Search
Backup
Exit

Log Type: All

Start Time: 04/24/2013 End Time: 04/24/2013

TYPE	CON.	TIME	POINT	RECORD
ALARM	VL	13-04-24	08:43:20	
ALARM	VL	13-04-24	08:43:20	
ALARM	VL	13-04-24	08:43:20	
ALARM	VL	13-04-24	08:43:20	
ALARM	VL	13-04-24	08:43:20	
ALARM	VL	13-04-24	08:43:20	

8 To browse the list, click the control buttons ⏮ ◀ ▶ ⏭.

9 To save the log information, click **Backup**.

10 When saving is complete, click **OK**.

Note:

- The log files are saved in "*.TXT" format.
- Do not remove the USB device while file transferring is in progress.

4.4 Setting the Network

To enable remote monitoring, recording, playing, or configuring the setting via KGUARD Web Client or Kview Center software, you need to configure the network settings and setup port forwarding in Router. Consult your Internet Service Provider (ISP) to determine the type of network connection you are using and the required parameters to complete the setup.

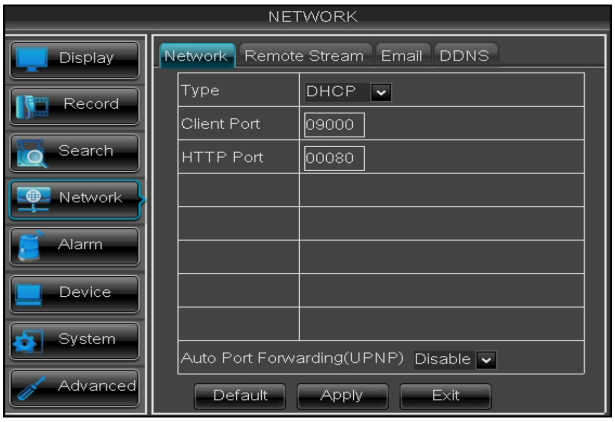
4.4.1 Network Settings

You can use the Network menu to setup how the DVR connects to the network. It provides three network connection options: Static IP, DHCP, and PPPoE.

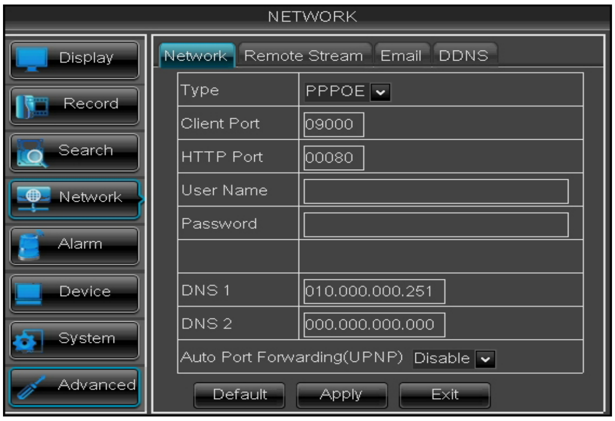
1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **NETWORK**.

3 On **Type**, select the type of network connection you are using.


NETWORK
Display
Record
Search
Network
Alarm
Device
System
Advanced
Network
Remote Stream
Email
DDNS
Default
Apply
Exit

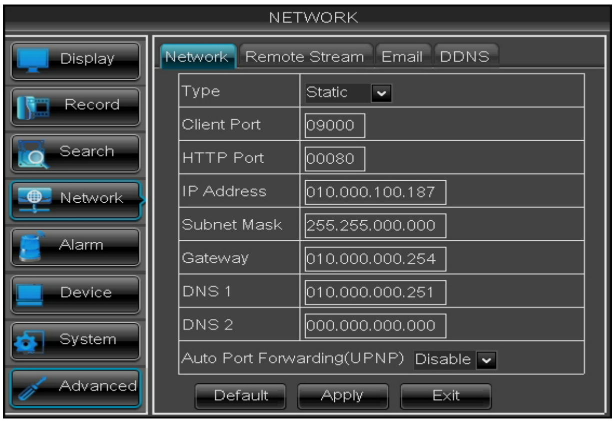
Type: DHCP
Client Port: 09000
HTTP Port: 00080
Auto Port Forwarding(UPNP): Disable


NETWORK
Display
Record
Search
Network
Alarm
Device
System
Advanced
Network
Remote Stream
Email
DDNS
Default
Apply
Exit

Type: PPPOE
Client Port: 09000
HTTP Port: 00080
User Name:
Password:
DNS 1: 010.000.000.251
DNS 2: 000.000.000.000
Auto Port Forwarding(UPNP): Disable

- **DCHP**: With Dynamic Host Configuration Protocol (DHCP) service, your router will automatically assign an IP address to your computer connected to the network.

- **PPPoE:** The Point-to-Point Protocol over Ethernet (PPPoE) is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames. This network protocol allows the device to be directly connected using a DSL modem.


NETWORK
Display
Record
Search
Network
Alarm
Device
System
Advanced
Network
Remote Stream
Email
DDNS
Default
Apply
Exit

Type: Static
Client Port: 09000
HTTP Port: 00080
IP Address: 010.000.100.187
Subnet Mask: 255.255.000.000
Gateway: 010.000.000.254
DNS 1: 010.000.000.251
DNS 2: 000.000.000.000
Auto Port Forwarding(UPNP): Disable

- **Static IP**: This network protocol allows you to configure the network interface using a fixed IP address.

4 Specify the **Client Port** and **HTTP Port** numbers.

- Client Port: Specify the port number that the device will use to send DVR command and video stream.
- HTTP Port: Specify the port number that you will use to log in to the device.

Note:

- Obtain these information from your network administrator or your Internet Service Provider (ISP).
- If you cannot use the either of the two default ports, 80 or 9000, the specified port may be occupied by other programs or it is being blocked by your service provider. Enter other port number. In this case, you need to add the port number after the IP address. For example, if you set the **HTTP Port** as 85, you need to enter the IP address as "192.168.3.103:85".

5 Enter other parameter settings (if applicable).

- If your network connection is **Static**, specify the static IP address, Subnet Mask, Gateway, and DNS 1/DNS 2 IP addresses.
- If your network connection is **PPPoE**, enter the User Name and Password that you setup with your DSL service provider. Then, specify the DNS 1/DNS 2 IP addresses.

Note:

The system supports two DNS server input options: DNS Server1 for main server and DNS Server2 for sub server.

Please contact your local ISP (Internet Service Provider) to obtain the correct DNS Server parameter.

6 To enable **Auto Port Forwarding (UPNP)** feature, select **Enable**.

Note:

Not all routers support the Auto Port Forwarding feature. If this function does not work, you must manually open the ports in your router.

7 After all settings are complete, click **Apply**.

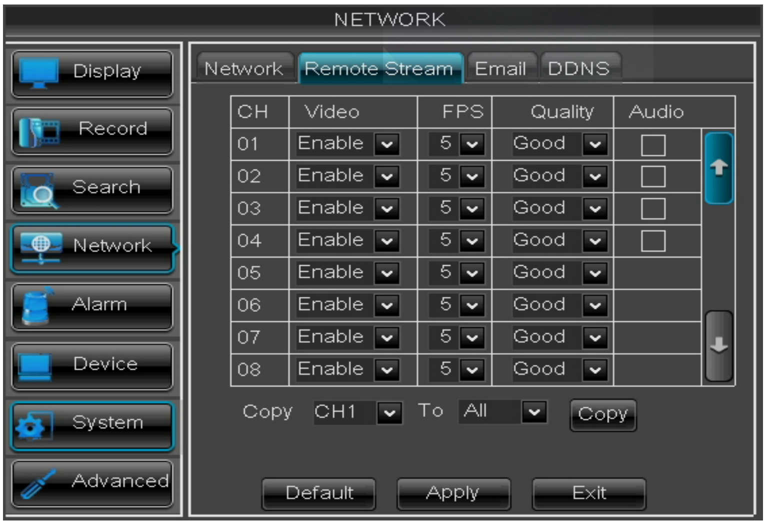
8 When data saving is complete, click **OK**.

4.4.2 Remote Stream Setup

The Remote Stream page allows you to enable or disable video output of a particular channel if the channel is being viewed via remote access.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **NETWORK**, select the **Remote Stream** tab. The remote stream framerate settings are displayed on a table.



CH	Video	FPS	Quality	Audio
01	Enable	5	Good	☐
02	Enable	5	Good	☐
03	Enable	5	Good	☐
04	Enable	5	Good	☐
05	Enable	5	Good	
06	Enable	5	Good	
07	Enable	5	Good	
08	Enable	5	Good	

Copy CH1 To All Copy

3 Select the channel and adjust the corresponding settings such as **Video**, **FPS**, and **Quality**.

4 Check the **Audio** box to enable audio.

5 To copy the current settings to all channels or one specific channel. Click the arrow on **Copy** and **To** to select an option and then click **Copy**.

6 After all settings are complete, click **Apply**.

7 When data saving is complete, click **OK**.

4.4.3 Email Settings

The DVR supports sending of email notifications when events occur, such as when motion is detected or the HDD fails at the specified channel, day, and time.

Note:
Be sure that the DVR network connection is properly configured before proceeding with the email setup.

To set up email, do the following:

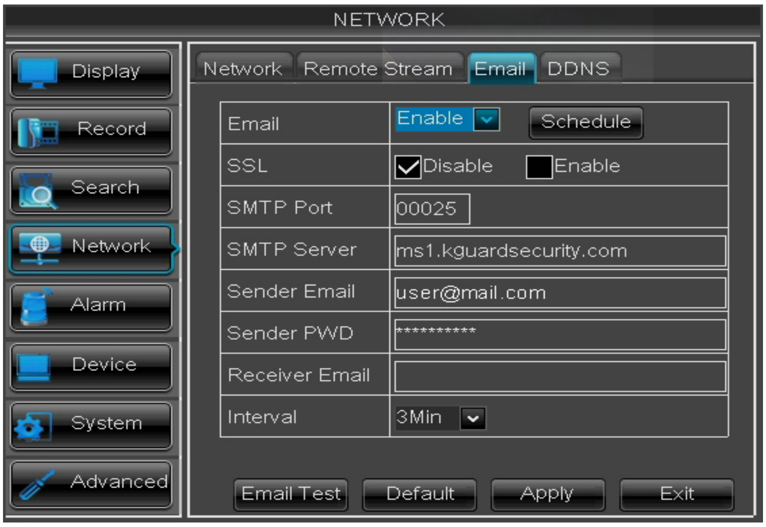
1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **NETWORK**, select the **Email** tab.

3 On **Email**, select **Enable**.

4 Click **Schedule** to implement the email schedule. For details, refer to "Email Schedule Setup" on page 55.

5 On **SSL**, select the **Enable** check box if your email server needs the SSL verification. Check with your email service provider for the applicable setting.



Email	Enable
SSL	☑ Disable ☐ Enable
SMTP Port	00025
SMTP Server	ms1.kguardsecurity.com
Sender Email	user@mail.com
Sender PWD	**********
Receiver Email	
Interval	3Min

6 Enter the **SMTP port** and **SMTP Server** of the sending email server, the email address and password of the sender in **Sender** and **Sender PWD** respectively.

Note:
By default, the SMTP port is 25 for email without SSL verification. For Gmail server or for email that needs SSL verification, the SMTP port is 465, by default. Check with your ISP for the correct setting.

7 In **Receiver Email**, enter the email address where the notification email is to be sent. In **Interval**, select an email sending interval.

8 After all settings are complete, click **Apply**.

9 When data saving is complete, click **OK**.

Email Schedule Setup

Set the email notification to be sent at the specified time.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

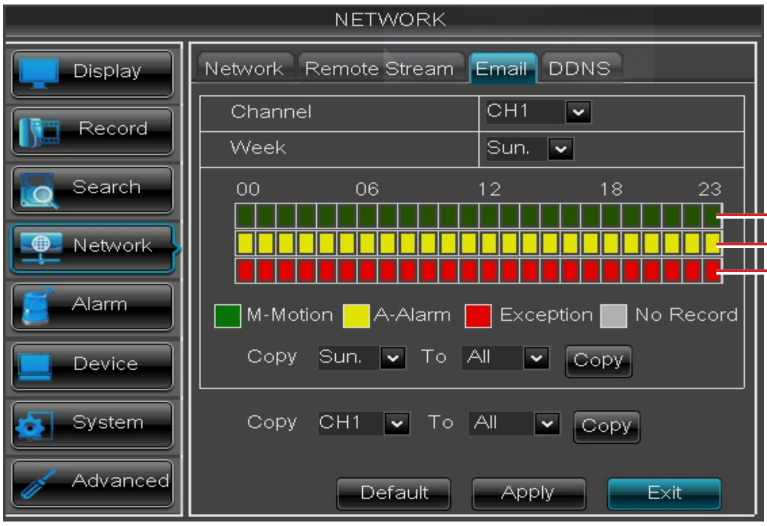
2 Select **Main Menu** > **NETWORK**, select the **Email** tab.

3 Click **Schedule**.

4 On **Channel**, select the channel you want to set the schedule.

5 On **Week**, select the days of the week to implement the schedule.

6 The number labels on top of the grid indicates the time of the day. Click a box to mark the schedule.


NETWORK
Display
Record
Search
Network
Alarm
Device
System
Advanced
Network
Remote Stream
Email
DDNS
00
06
12
18
23
🟩 M-Motion
🟨 A-Alarm
🟥 Exception
⬜ No Record
Copy
Default
Apply
Exit

Channel CH1

Week Sun.

Copy Sun. To All

Copy CH1 To All

Slot for Motion

Slot for Alarm

Slot for Events

Note:
Alarm is only available for 16-channel model.

7 To remove a marked schedule, click the box again. The box turns gray.

8 After all settings are complete, click **Apply**.

« TIP »

- To copy the current settings to other days, select the day, then click **Copy**.
- To copy the current settings to other channels, select the channel, then click **Copy**.

9 When data saving is complete, click **OK**.

4.4.4 DDNS Settings

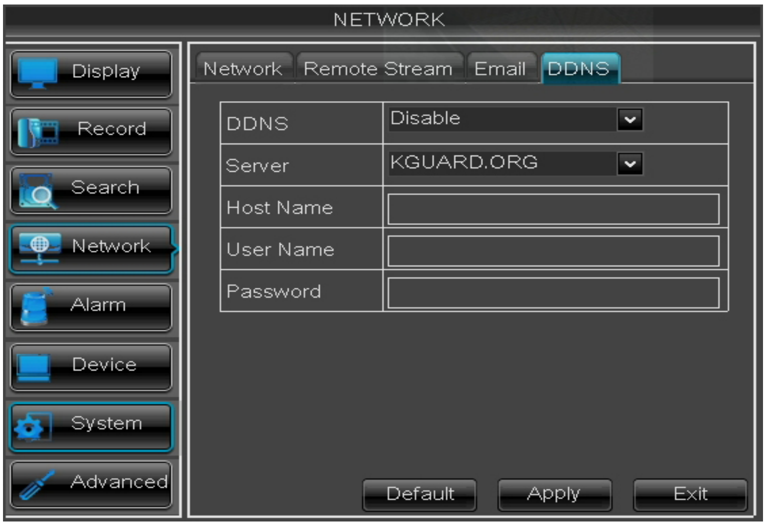
DDNS (Dynamic DNS) is a service that registers a domain name and the floating IP address with a DDNS server so that the domain name can be routed to the IP address even if the IP is changed in a dynamic IP system.

To use this feature, you must have a DDNS account. Consult with your Internet Service Provider for this service or create a DDNS account with KGUARD.org server, see http://www.kguard.org.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **NETWORK**, select the **DDNS** tab.

3 Set **DDNS** to **Enable**.


NETWORK
Display
Record
Search
Network
Alarm
Device
System
Advanced
Network
Remote Stream
Email
DDNS
Default
Apply
Exit

DDNS: Disable
Server: KGUARD.ORG
Host Name:
User Name:
Password:

4 On **Server**, select the DDNS server.

5 On **Host Name**, enter the domain name you registered on DDNS server.

Note:
If the registered domain name is 123ABC, the IP address you type on IE or Safari when you browse Kguard Web Client is http://123ABC.KGUARD.ORG.

6 Enter the DDNS **User Name** and **Password**.

7 After all settings are complete, click **Apply**.

8 When data saving is complete, click **OK**.

Note:
To apply for a free DDNS account on http://www.kguard.org.

4.5 Setting Alarms

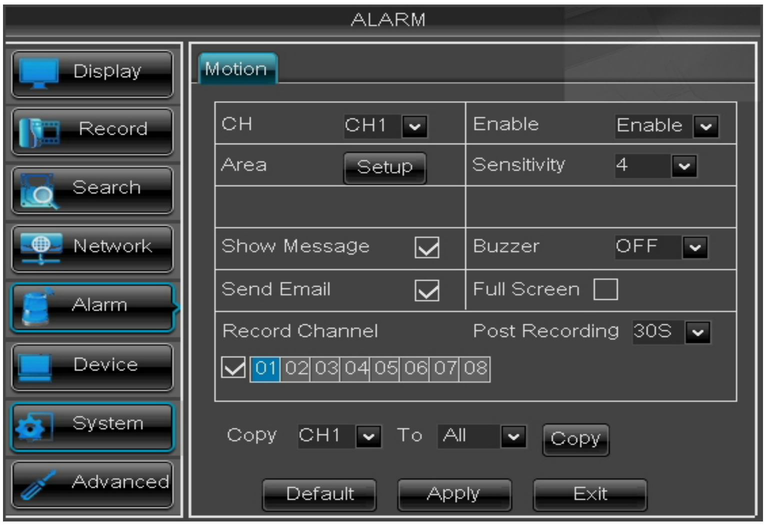
On the alarm menu, you can configure the motion detection and the alarm notification settings.

4.5.1 Motion Detection Alarm Settings

For added security, enable the motion detection feature. When motion is detected on a selected area, the DVR issues an alarm notification. To set the motion detection alarm, do the following:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ALARM**.



CH: CH1
Enable: Enable
Area
Sensitivity: 4
Show Message ☑
Buzzer: OFF
Send Email ☑
Full Screen ☐
Record Channel ☑ 01 02 03 04 05 06 07 08
Post Recording: 30S
Copy CH1 To All

3 Modify the necessary settings:

Menu item	Description
Channel	Select the channel to set motion detection.
Enable	Select **Enable** to enable motion detection alarm for the channel.
Area	Click **Setup** to select the area for motion detection alarm. See "Set Motion Detection Area" on page 58.
Sensitivity	Select the motion detection sensitivity rate. Options are : 1~8, wherein "8" is the most sensitive and "1" is the least sensitive.
Show Message	Check the box to display a message on screen when the alarm is triggered.
Buzzer	Set the buzzer duration when motion is detected (Off/10 S/20 S/40 S/60 S). To disable buzzer, select **Off**.
Send Email	Check to enable email alarm notification. If the function is enabled, the system will send the alarm images to the specified email address. See "4.4.3 Email Settings" on page 54.
Full Screen	Check the box to enable this function. If this function is enabled and the alarm is triggered, the corresponding channel will be displayed in full screen. Select the screen display duration (1 S/3 S/5 S/7 S/10 S)
Record Channel	Check the box to enable recording and then select the channels to record when the alarm is triggered.
Post Recording	Select the post-recording duration.

4 Click **Apply**.

5 When data saving is complete, click **OK**.

« TIP »

- To copy the current settings to other channels, select the channel, then click **Copy**.
- To revert to the default alarm settings, click **Default**.

6 When data saving is complete, click **OK**.

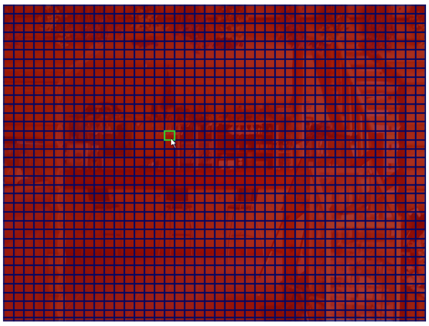
Set Motion Detection Area

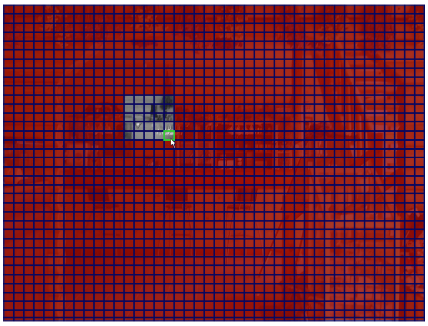
1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ALARM**.

3 Click **Setup**.

4 A grid screen with a green cursor appears. By default, the whole screen is marked for motion detection (red block). If you want to disable motion detection on an area, click the grid cursor and then drag the mouse to highlight the scope to unmark the area (transparent block) for motion detection.





5 To close the grid screen, click the right mouse button.

6 After all settings are complete, click **Apply**.

7 When data saving is complete, click **OK**.

When motion detection is enabled on a channel, the channel screen displays the motion detection icon M.

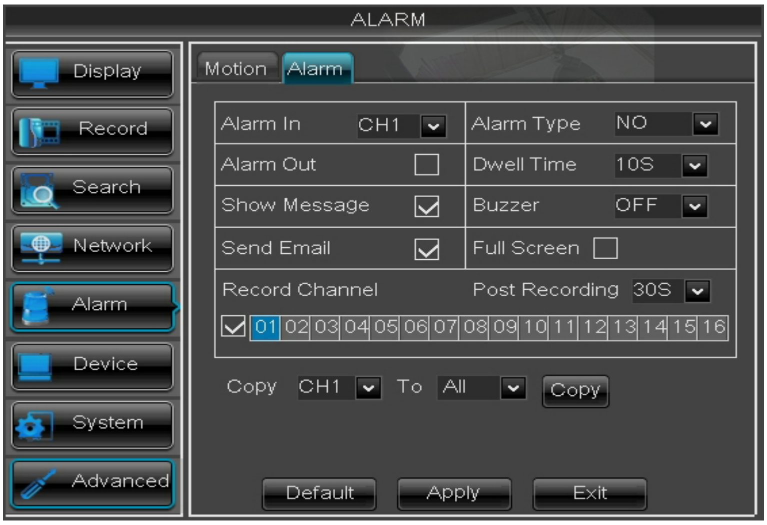
> **« TIP »**
> To copy the current settings to other channels, select the channel(s) in **Copy To** and then click **Copy**.

4.5.2 Other Alarm Settings (16-Channel only)

For 16-channel DVRs with a connected alarm device, do the following to set up the alarm settings:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ALARM**, select the **Alarm** tab.



Alarm In CH1
Alarm Type NO
Alarm Out ☐
Dwell Time 10S
Show Message ☑
Buzzer OFF
Send Email ☑
Full Screen ☐
Record Channel
Post Recording 30S
☑ 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16
Copy CH1 To All

3 Modify the necessary settings:

Menu item	Description
Alarm In	Select the channel that will trigger the alarm.
Alarm Type	Select the alarm type: **NO** (Normal-Open), **NC** (Normal-Close), or **OFF**.
Alarm Out	If an alarm device is connected, check the box to make the device sound the alarm when triggered.
Dwell Time	Select the alarm sound duration of the I/O alarm device (10S/20S/40S/60S) then check to apply the setting to each alarm type.
Show Message	Check the box to display a message on screen when the alarm is triggered.
Buzzer	Set the buzzer duration when the alarm is triggered (Off/10 S/20 S/40 S/60 S). To disable buzzer, select **Off**.
Send Email	Check to enable email alarm notification. If the function is enabled, the system will send the alarm images to the specified email address. See "4.4.3 Email Settings" on page 54.
Full Screen	Check the box to enable this function. If this function is enabled and the alarm is triggered, the corresponding channel will be displayed in full screen. Select the screen display duration (1 S/3 S/5 S/7 S/10 S)
Record Channel	Check the box to enable recording and then select the channels to record when the alarm is triggered.
Post Recording	Select the post-recording duration.

4 Click **Apply**.

5 When data saving is complete, click **OK**.

« TIP »

- To copy the current settings to other channels, select the channel, then click **Copy**.
- To revert to the default alarm settings, click **Default**.

6 When data saving is complete, click **OK**.

4.6 Setting the Device

4.6.1 Storage Device Setup

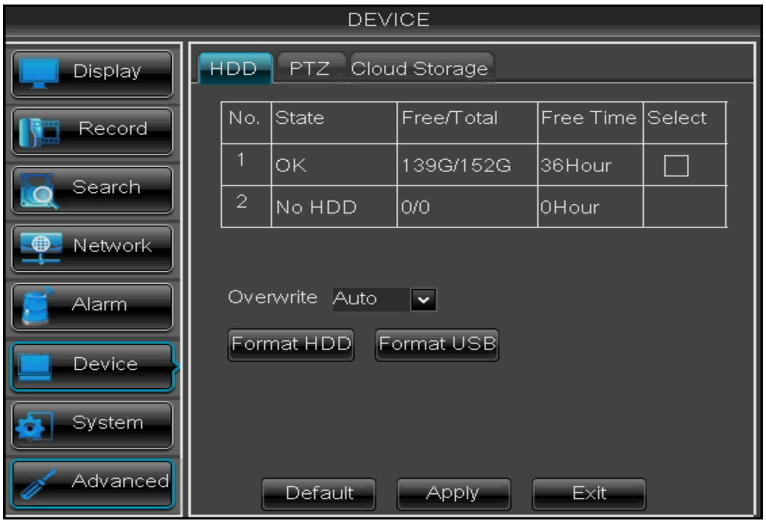
To ensure the hard disk drive is properly set, it is important to configure the hard disk drive settings before its initial usage. For other external hard drive and USB device, it is recommended to format those devices before their initial usage.

Setting HDD

To set up the hard disk drive, do the following:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **DEVICE**.



No.	State	Free/Total	Free Time	Select
1	OK	139G/152G	36Hour	☐
2	No HDD	0/0	0Hour	

Overwrite Auto

3 Select the hard disk drive that you want to configure. A √ icon appears on the check box to indicate that the HDD has been selected.

4 On **Overwrite**, select an overwrite interval options (Auto/1 Hour/3 Hours/1 Day/7 Days/30 Days/90 Days/Close).

Note:
If the overwrite is set to **Close**, the recording will stop once the hard disk drive is full.

5 After all settings are complete, click **Apply**.

6 When data saving is complete, click **OK**.

Formatting HDD

After a new hard disk drive is properly installed in the DVR, the system automatically detects the HDD and prompts for disk formatting.

To format the hard disk drive, do the following:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **DEVICE**.

3 Select the hard disk drive that you want to format.

4 Click **Format HDD**.

5 An "All data will be deleted after formatting" warning message appears on the screen. Click **OK** to proceed.

6 When the formatting process is complete, click **OK**.

Formatting USB drive

To format the USB disk drive, do the following:

1 Plug a USB device into the USB port of the DVR.

2 In preview mode, right-click on the mouse to display the Pop-up menu.

3 Select **Main Menu** ⌂ > **DEVICE**.

4 Click **Format USB**.

5 An "All data will be deleted after formatted" warning message appears on the screen. Click **OK** to proceed.

6 When the formatting process is complete, click **OK**.

Note:
Do not remove the USB device while drive formatting is in progress.

4.6.2 PTZ Setup

After the PTZ speed dome is properly installed via RS-485 connection, you can customize its settings using the PTZ SETUP menu.

To set up the PTZ camera setting, do the following:

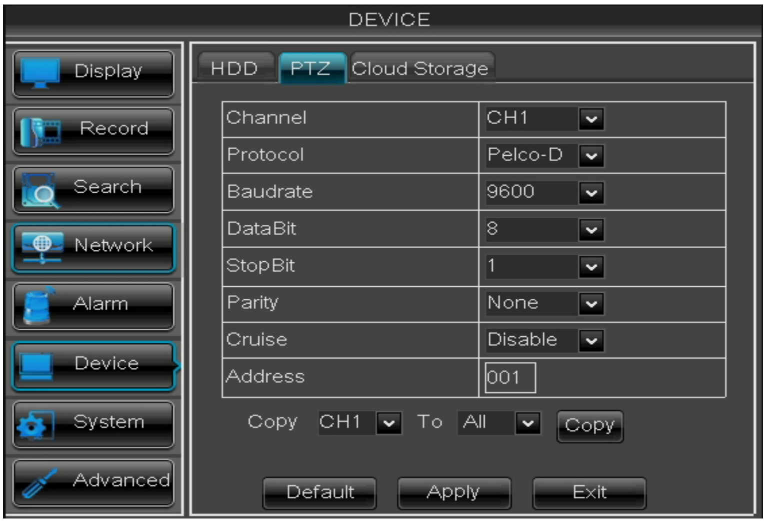
1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** ⌂ > **DEVICE**, select the **PTZ** tab.

3 Select the channel which the PTZ camera is connected to.

4 Set the PTZ **Protocol**, **Baudrate**, **Data BIT**, **Stop BIT**, **Parity**, **Address** code.

5 Enable or disable **Cruise** mode.



Channel	CH1
Protocol	Pelco-D
Baudrate	9600
DataBit	8
StopBit	1
Parity	None
Cruise	Disable
Address	001

Copy CH1 To All Copy

6 After all settings are complete, click **Apply**.

« TIP »
To copy the current settings to other channels, select the channel(s) in **Copy To** and then click **Copy**.

7 When data saving is complete, click **OK**.

Note:
The PTZ camera can only be activated when a connected channel with the PTZ camera is selected.

4.6.3 Cloud Storage

You can use the Cloud Storage menu to setup a cloud storage account and receive snapshots from your DVR.

Note:
At present, your DVR supports the Dropbox cloud storage. Before setting up the cloud storage on the DVR, make sure your Dropbox account has been created and active (Dropbox website: www.dropbox.com) and the Network settings of your DVR has been configured properly, see “4.4.1 Network Settings” on page 52.

Enabling Cloud Storage

To enable the cloud storage setting, do the following:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **DEVICE**, select the **Cloud Storage** tab.

3 On **Cloud Storage**, select **Enable**.

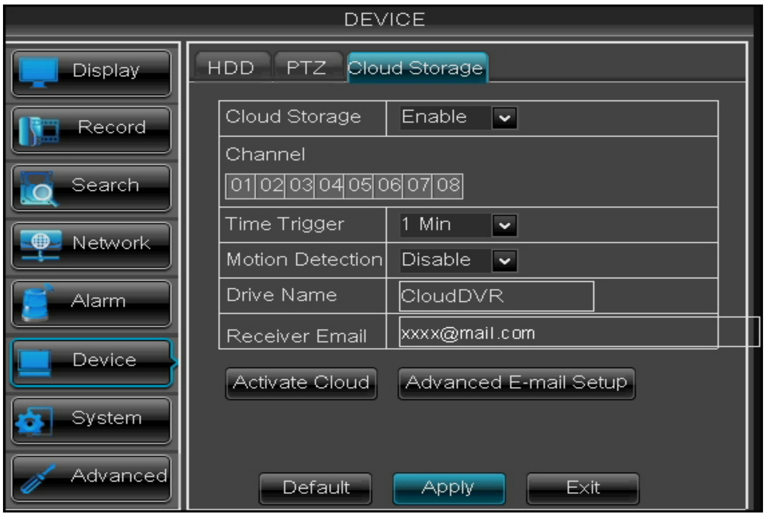
4 Check the channels to upload the channel snapshots.

5 On **Interval**, select the interval time between uploading snapshots to the cloud storage.

6 Enable **Motion Detection** if you want the DVR to upload snapshots when motion is detected.

7 In Drive Name, enter a cloud storage name for your DVR.

8 In **Receiver Email**, type your e-mail account to receive the cloud storage activation link.



DEVICE

Cloud Storage: Enable

Channel: 01 02 03 04 05 06 07 08

Time Trigger: 1 Min

Motion Detection: Disable

Drive Name: CloudDVR

Receiver Email: xxxx@mail.com

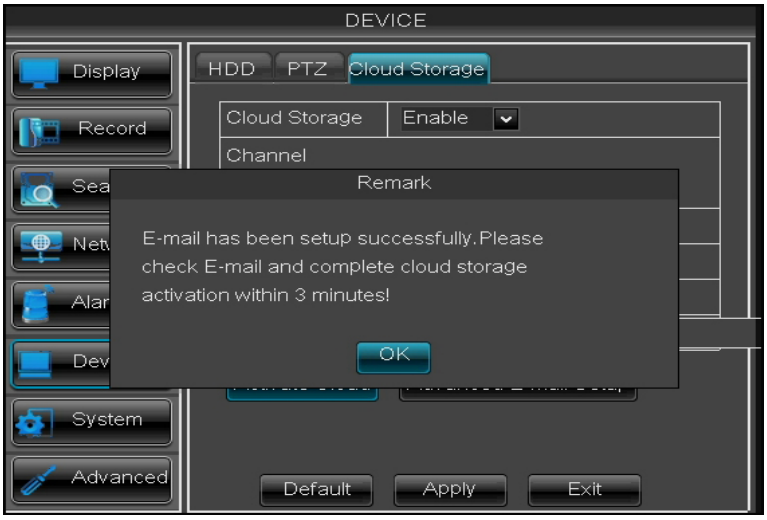
9 After all settings are complete, click **Apply**.

Activate Cloud Storage

Every time the cloud storage account is changed, you must activate the account again to recognize the changes.

To activate the cloud storage setting, do the following:

1 On the CLOUD STORAGE screen, click **Activate Cloud**. An activation e-mail will be sent to the Receiver e-mail account.


DEVICE
Display
Record
Sea
Netw
Alar
Dev
System
Advanced
HDD
PTZ
Cloud Storage
Channel
Remark
OK
Default
Apply
Exit

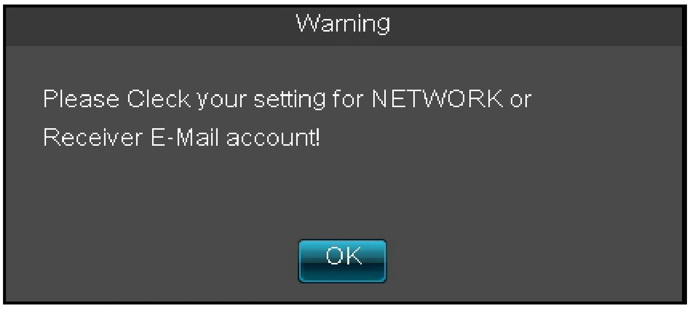
Cloud Storage: Enable

E-mail has been setup successfully.Please check E-mail and complete cloud storage activation within 3 minutes!

2 Click **OK** to continue.

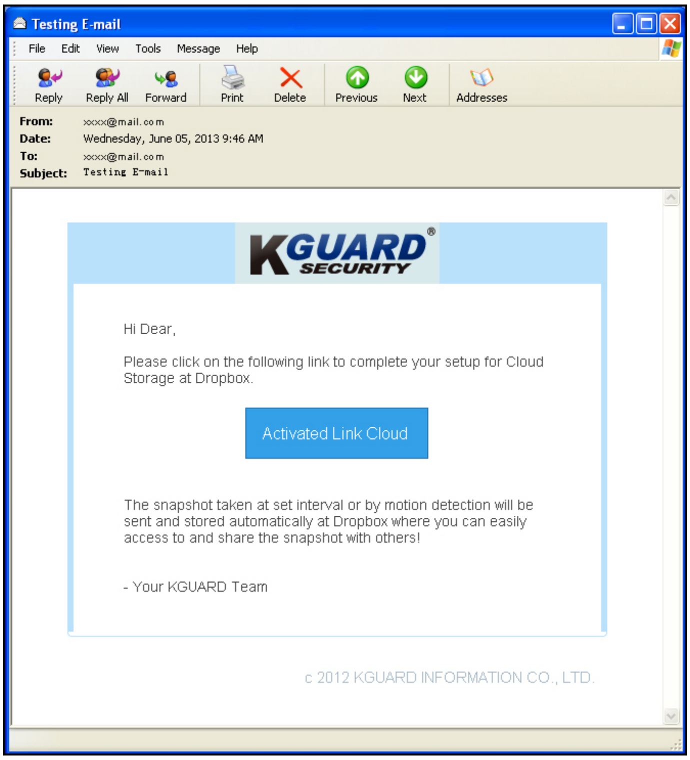
Note:

- An e-mail will be sent to the Receiver e-mail account after clicking **Activate Cloud**. You must check your e-mail and follow the link to complete cloud storage activation within 3 minutes.
- If below message appears on the screen, please check if network is configured properly and receiver email address is correct. If receiver email is still not working, click Advanced E-mail Setup to configure your email settings. See "4.4.3 Email Settings" on page 54.



Please Cleck your setting for NETWORK or Receiver E-Mail account!

3 Open your email and click **Activated Link Cloud**.


Testing E-mail
File
Edit
View
Tools
Message
Help
Reply
Reply All
Forward
Print
Delete
Previous
Next
Addresses
KGUARD SECURITY
Activated Link Cloud

From: xxxx@mail.com
Date: Wednesday, June 05, 2013 9:46 AM
To: xxxx@mail.com
Subject: Testing E-mail

Hi Dear,

Please click on the following link to complete your setup for Cloud Storage at Dropbox.

The snapshot taken at set interval or by motion detection will be sent and stored automatically at Dropbox where you can easily access to and share the snapshot with others!

- Your KGUARD Team

c 2012 KGUARD INFORMATION CO., LTD.

4 Follow the on-screen instructions to complete the cloud account activation. After the account activation is complete, the snapshot taken at the preset time interval or by motion detection will be uploaded and stored automatically at Dropbox.

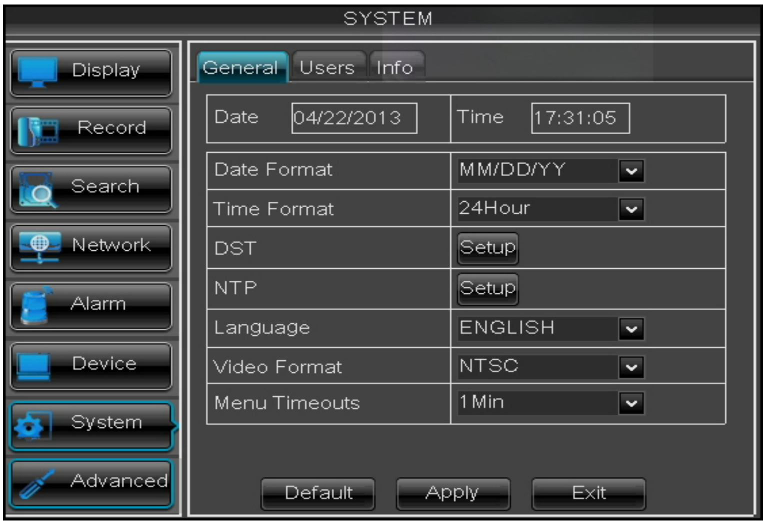
4.7 System Settings

On the SYSTEM menu, you can configure the date and time, user and password, video output, on screen display language, and view the system information.

4.7.1 General Settings

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SYSTEM**.



Date	04/22/2013
Time	17:31:05
Date Format	MM/DD/YY
Time Format	24Hour
DST	Setup
NTP	Setup
Language	ENGLISH
Video Format	NTSC
Menu Timeouts	1 Min

3 Modify the necessary settings.

Menu item	Description
Date	Set the system date.
System Time	Set the system time.
Date Format	Select the date format.
Time Format	Select the time format.
DST	Click **Setup** to use Daylight Saving Time. See “Setting Daylight Saving Time” on page 66.
NTP	Click **Setup** to synchronize date and time with an NTP server. See “Synchronizing Time with NTP Server” on page 65 below.
Language	Select the menu language.
Video Format	Select the video format in your location: **NTSC** or **PAL**.
Menu Timeouts	Select the menu time out.

4 After all settings are complete, click **Apply**.

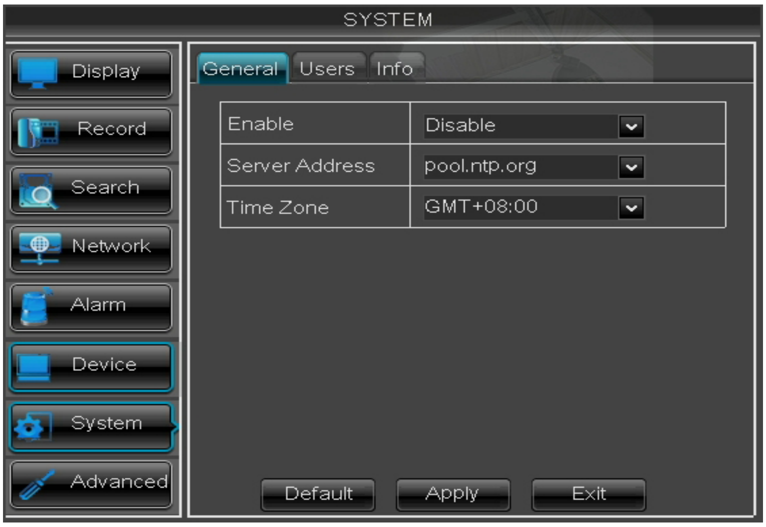
5 When data saving is complete, click **OK**.

Synchronizing Time with NTP Server

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SYSTEM**.

3 In **NTP**, click **Setup**.


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
Default
Apply
Exit

Enable	Disable
Server Address	pool.ntp.org
Time Zone	GMT+08:00

4 On **Enable**, select **Enable** to allow the system to synchronize with an NTP server.

5 On **Server Address**, select the NTP server.

6 Select the **Time Zone** in your location.

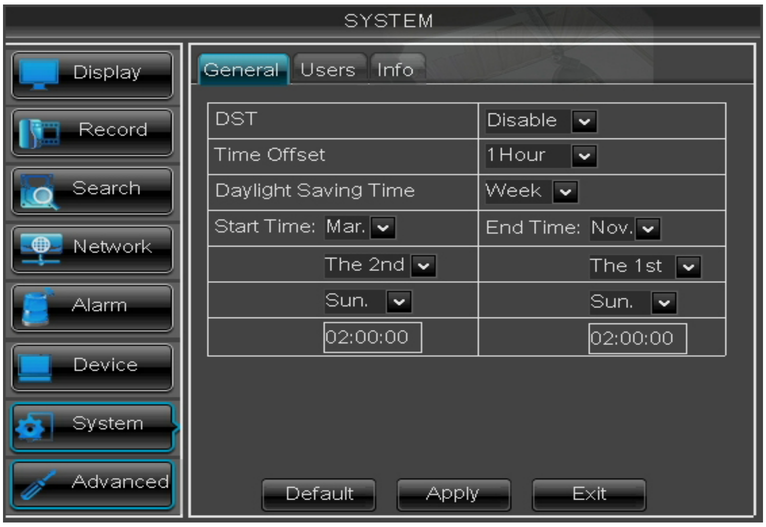
7 Click **Apply** to save the settings.

Setting Daylight Saving Time

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** ⌂ > **SYSTEM**.

3 In **DST**, click **Setup**.


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
Default
Apply
Exit

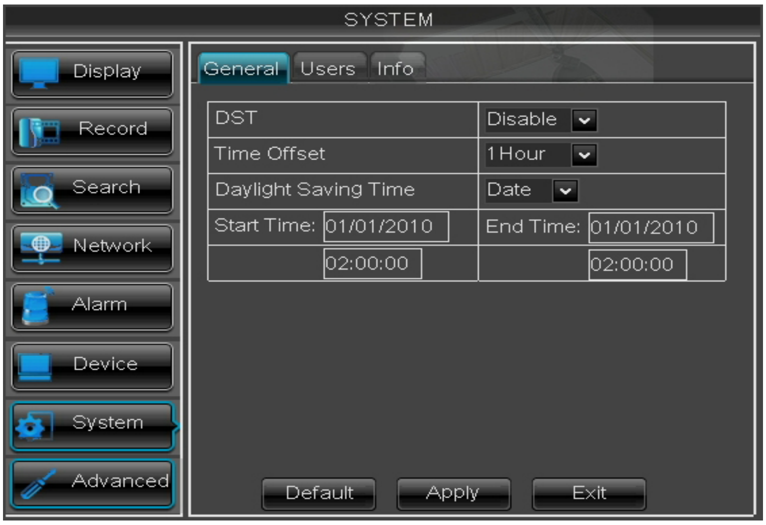
DST	Disable
Time Offset	1 Hour
Daylight Saving Time	Week
Start Time: Mar.	End Time: Nov.
The 2nd	The 1st
Sun.	Sun.
02:00:00	02:00:00

4 In **Daylight Saving Time**, select **Enable**.

5 In **Time Offset**, select the amount of time to offset for DST.

6 Select the **Daylight Saving Time Mode**.

- **Week**: Enter the **Start Time** and **End Time** information by selecting the starting/ending month, week, day, and entering the starting/ending time.
- **Date**: Enter the **Start Time** and **End Time** information by entering the starting/ending date and time.


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
Default
Apply
Exit

DST	Disable
Time Offset	1 Hour
Daylight Saving Time	Date
Start Time: 01/01/2010	End Time: 01/01/2010
02:00:00	02:00:00

7 After all settings are complete, click **Apply**.

8 When data saving is complete, click **OK**.

4.7.2 User and Password Settings

The Users page allows you to change the password and authorize users and set the access rights in using the DVR. There is one administrator account and 6 user accounts. By default, the administrator account's user name is "admin" and the password is 123456. We suggest you change the password to protect your privacy. Only the administrator account is enabled by default. To grant other user to access, see "Authorizing Other Users" on page 69.

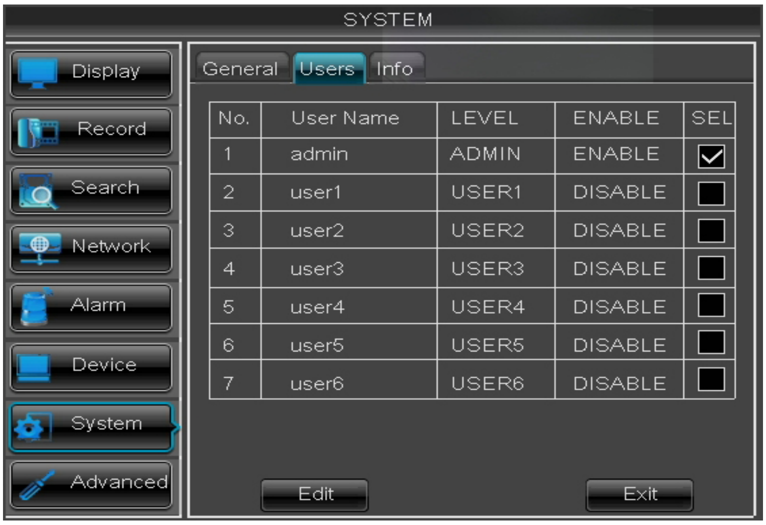
Changing the Password

To protect your account, modify your password.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

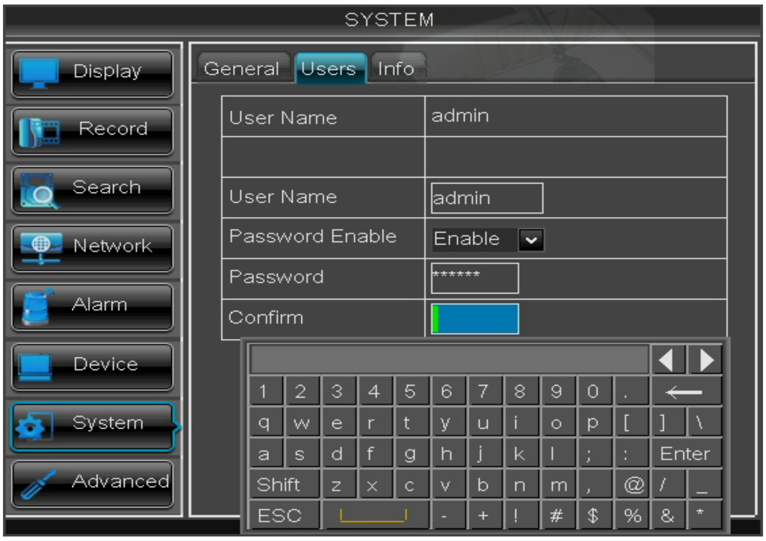
2 Select **Main Menu** > **SYSTEM**, select the **Users** tab.

3 Click the check box of the account to change the password. A √ icon appears.


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
Edit
Exit

No.	User Name	LEVEL	ENABLE	SEL
1	admin	ADMIN	ENABLE	☑
2	user1	USER1	DISABLE	☐
3	user2	USER2	DISABLE	☐
4	user3	USER3	DISABLE	☐
5	user4	USER4	DISABLE	☐
6	user5	USER5	DISABLE	☐
7	user6	USER6	DISABLE	☐

4 Click **Edit**.


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
1 2 3 4 5 6 7 8 9 0 .
q w e r t y u i o p [ ] \
a s d f g h j k l ; : Enter
Shift z x c v b n m , @ / _
ESC - + ! # $ % & *

User Name	admin
User Name	admin
Password Enable	Enable
Password	******
Confirm	

5 If you want to modify the user name, enter desired name in **User Name**.

6 Click the **Password** box to enter the password (see “3.6.2 Virtual Keyboard” on page 30 for details on using the virtual keyboard).

Note:
The password must be 6 numbers in length.

7 In **Confirm**, enter the password again.

8 After all settings are complete, click **Apply**.

9 When data saving is complete, click **OK**.

Configuring Other Users

Only the administrator can enable or disable a user account.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SYSTEM**, select the **Users** tab.

3 Click the check box of a user account. A √ icon appears.

4 Click **Edit**.

5 Enter the **User Name** (see “3.6.2 Virtual Keyboard” on page 30 for details on using the virtual keyboard).

6 To prompt for password, select **Enable** in **Password Status**.

7 Enter the password in **Password** and **Confirm**.

8 After all settings are complete, click **Apply**.

9 When data saving is complete, click **OK**.

Authorizing Other Users

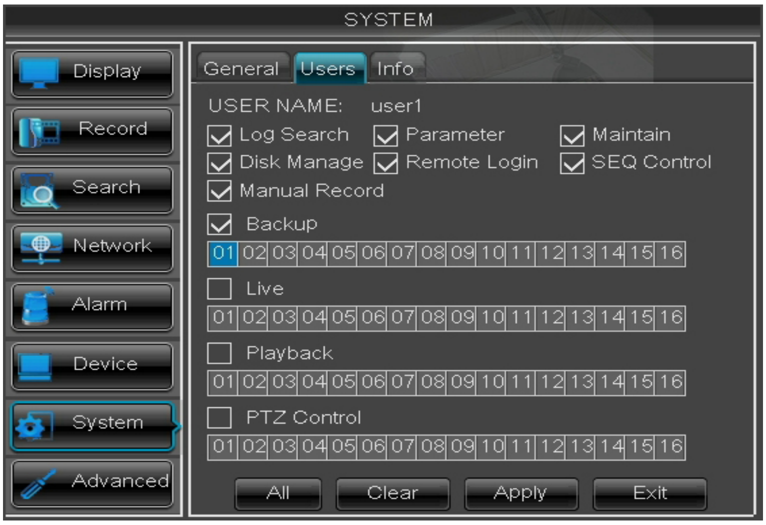
Only the administrator can grant access rights to users. To set the access rights, you must login using an administrator account, and then do the following:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SYSTEM**, select the **Users** tab.

3 Click the check box of a user account. A √ icon appears.

4 Click **Permission**.


SYSTEM
Display
Record
Search
Network
Alarm
Device
System
Advanced
General
Users
Info
All
Clear
Apply
Exit

USER NAME: user1

☑ Log Search ☑ Parameter ☑ Maintain
☑ Disk Manage ☑ Remote Login ☑ SEQ Control
☑ Manual Record

☑ Backup
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

☐ Live
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

☐ Playback
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

☐ PTZ Control
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

5 Select the check box of the corresponding menu that you want to allow the user to access.

« TIP »
Click **All** to check all options or click **Clear** to deselect all options.

6 After all settings are complete, click **Apply**.

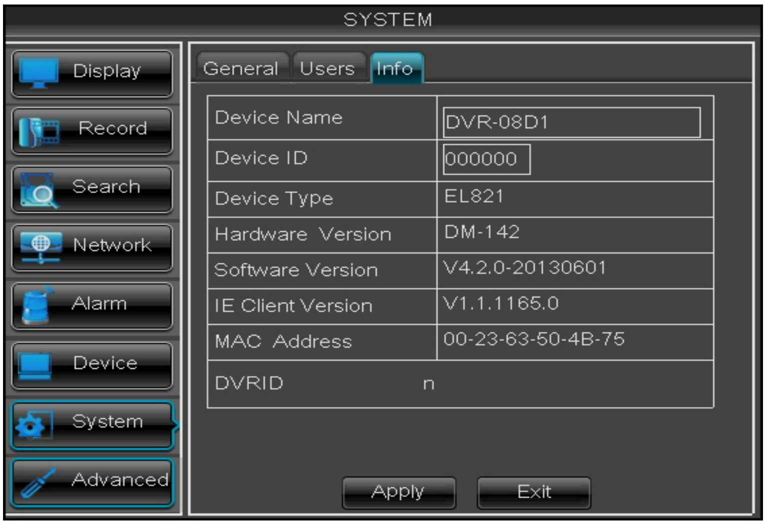
7 When data saving is complete, click **OK**.

4.7.3 View System Info

The Version page allows you to configure the device name and ID, as well as view the MAC address, firmware version and other system information.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SYSTEM**, select the **Info** tab.



Device Name	DVR-08D1
Device ID	000000
Device Type	EL821
Hardware Version	DM-142
Software Version	V4.2.0-20130601
IE Client Version	V1.1.1165.0
MAC Address	00-23-63-50-4B-75
DVRID	n

Menu Item	Description
Device Name	Enter desired name for the DVR. The name can be composed of alphanumeric characters. See “3.6.2 Virtual Keyboard” on page 30 for details on using the virtual keyboard.
Device ID	Enter desired ID for the DVR. The device ID, used to identify the DVR, can only be composed of numbers and cannot be the same with other IDs when multiple DVRs are connected in the same network.
Device Type	Displays the model type of the DVR.
Hardware Version	Displays the hardware version of the DVR.
Software Version	Displays the current software version of the DVR.
IE Client Version	Displays the current software version of the web client interface.
MAC Address	Displays the MAC address of the DVR. When multiple DVRs are connected to the same network, each DVR must have a unique MAC address to ensure that the DVR can connect to the network.
DVRID	Displays DVR ID of the DVR. This is also the QR code of this DVR.

3 Modify the **Device Name** and **Device ID**, if necessary.

4 Click **Apply** to save the settings.

5 When data saving is complete, click **OK**.

4.8 Advanced Settings

The Maintain page allows you to set automatic system maintenance, load factory defaults, update the firmware settings, or reboot and power off the DVR manually.

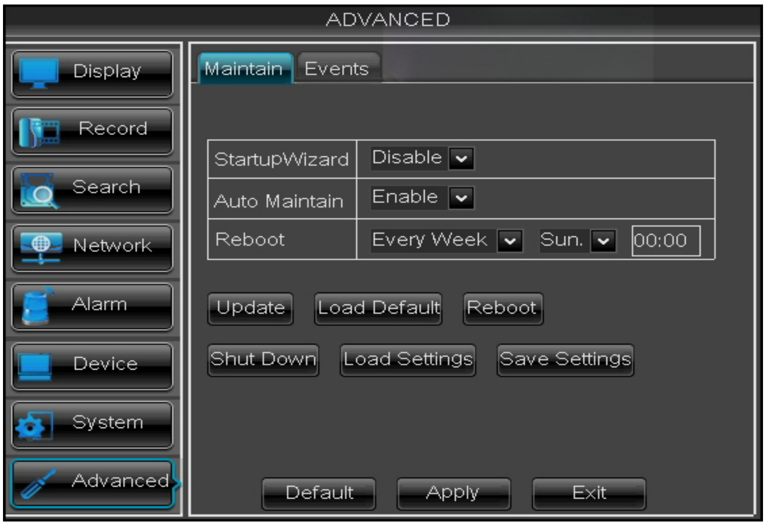
4.8.1 Maintenance Settings

Manual Reboot and Power Off

To reboot or power off the DVR instantly, do the following:

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ADVANCED**.

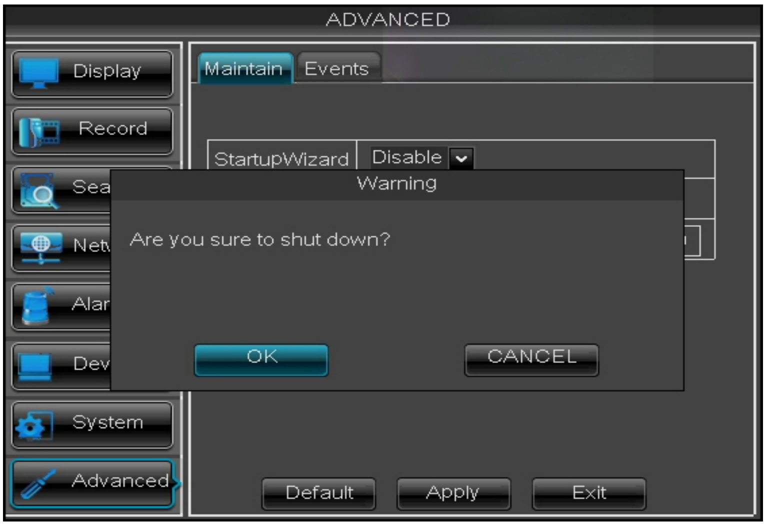

ADVANCED
Display
Record
Search
Network
Alarm
Device
System
Advanced
Maintain
Events
Update
Load Default
Reboot
Shut Down
Load Settings
Save Settings
Default
Apply
Exit

StartupWizard: Disable
Auto Maintain: Enable
Reboot: Every Week, Sun., 00:00

3 Do one of the following:

- Click **Shut Down** to turn off the DVR.
- Click **Reboot** to reboot the DVR.

4 A message appears, click **OK** to confirm the operation.


ADVANCED
Display
Record
Sea
Netw
Alar
Dev
System
Advanced
Maintain
Events
StartupWizard
Disable
Warning
OK
CANCEL
Default
Apply
Exit

Are you sure to shut down?

Note:
When turning off the DVR, wait for the message "Now you can unplug the power!" to appear on the screen, turn off the power switch (for 16-channel DVR only) and then unplug the power cord from the power outlet.

Disable Startup Wizard

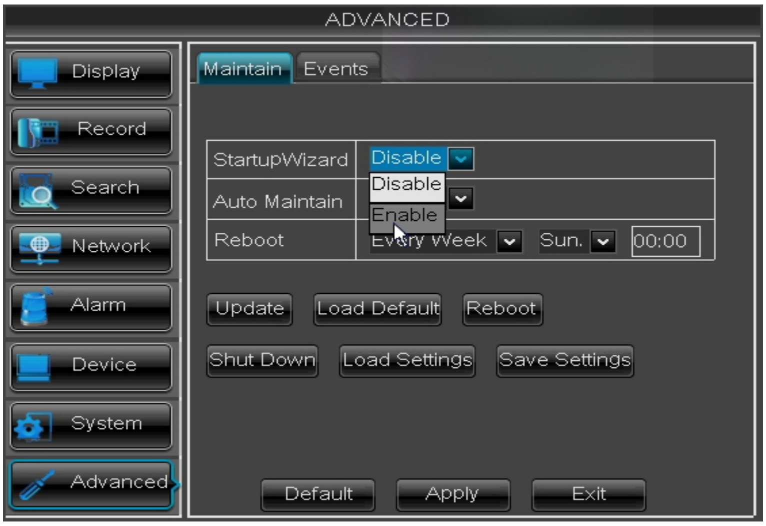
To prevent the Wizard Setup screen appears every time the system reboots, please disable StartupWizard here.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ADVANCED**.

3 Click **Maintain** tab.

4 Set **StartupWizard** to **Disable**.



StartupWizard: Disable

Auto Maintain

Reboot: Every Week, Sun., 00:00

ADVANCED
Display
Record
Search
Network
Alarm
Device
System
Advanced
Maintain
Events
Disable
Enable
Update
Load Default
Reboot
Shut Down
Load Settings
Save Settings
Default
Apply
Exit

5 Click **Apply**.

6 Click **OK**.

Set Auto Maintenance

Use this feature to automatically reboot the DVR on a specified schedule. When the DVR reboots, all settings and data are refreshed from the memory, which optimizes the DVR performance.

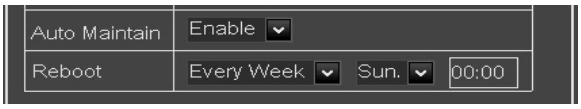
1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **SYSTEM** > **MAINTAIN**.

3 Set **Auto Maintain** to **Enable**.

4 In **Auto Reboot**, select the frequency to reboot the DVR. Options are:

- **Everyday**: Reboots the DVR on a daily basis. If this option is selected, specify the time you want to reboot the DVR.
- **Every Week**: Reboots the DVR on a weekly basis. If this option is selected, specify the day of the week and the time to reboot the DVR.



Auto Maintain: Enable

Reboot: Every Week, Sun., 00:00

- **Every Month**: Reboots the DVR on a monthly basis. If this option is selected, specify the date (1 to 31) and the time to reboot the DVR.

Note:
The illustration above is an example of **Auto Reboot** set to **Every Week**. The available fields vary depending on the selected **Auto Maintain** and **Auto Reboot** options.

5 After all settings are complete, click **Apply**.

6 When data saving is complete, click **OK**.

« TIP »
To restore the maintenance schedule to default setting, click **Default** at the bottom of the screen.

Update System Firmware

Use this feature to update the firmware with the latest version.

1 Check for available updates and download the firmware folder named “dvrupgrade”.

2 Save the “dvrupgrade” folder in a USB flash drive.

3 Insert the USB flash drive into a USB port of the DVR.

4 In preview mode, right-click on the mouse to display the Pop-up menu.

5 Select **Main Menu** > **ADVANCED**.

6 Click **Update**.

7 Follow the instructions on the screen to complete the update.

⚠**Warning:**
Do not turn off the power or unplug from the power supply while updating.

Load Default Settings

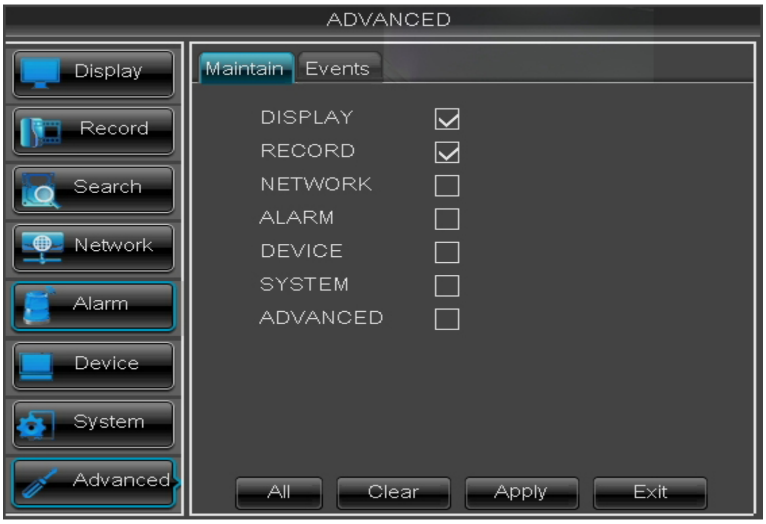
Use this feature to restore the factory default settings of the DVR.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ADVANCED**.

3 Click **Load Default**.

4 Check the check box of the settings that you want to restore.



DISPLAY ☑
RECORD ☑
NETWORK ☐
ALARM ☐
DEVICE ☐
SYSTEM ☐
ADVANCED ☐

« TIP »

- To restore all settings, click **All**.
- To deselect all checked boxes, click **Clear**.
- To cancel, click **Cancel**.

5 After all settings are complete, click **Apply**.

6 A warning message appears, click **OK** to confirm.

7 When data saving is complete, click **OK**.

Save System Settings

Use this feature to save the DVR current settings.

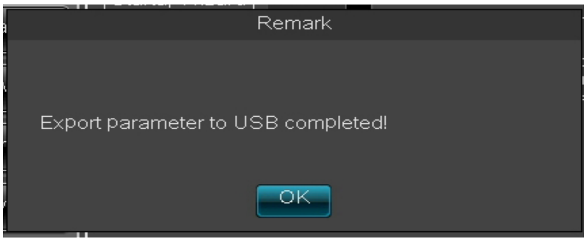
1 Insert the USB flash drive into a USB port of the DVR.

2 In preview mode, right-click on the mouse to display the Pop-up menu.

3 Select **Main Menu** 🏠 > **ADVANCED**.

4 Click **Save Settings**.

5 When data exporting is complete, click **OK**.



Export parameter to USB completed!

Note:
Do not remove the USB device while file transferring is in progress.

Load System Settings

Use this feature to import the settings stored in the USB flash drive.

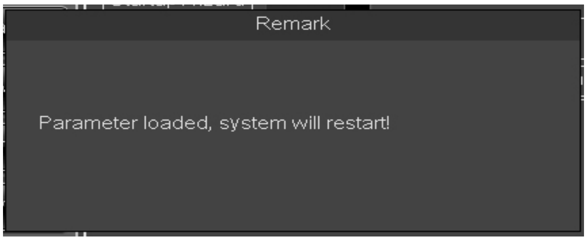
1 Insert the USB flash drive into a USB port of the DVR.

2 In preview mode, right-click on the mouse to display the Pop-up menu.

3 Select **Main Menu** 🏠 > **ADVANCED**.

4 Click **Load Settings**.

5 When data importing is complete, the system will automatically reboot.



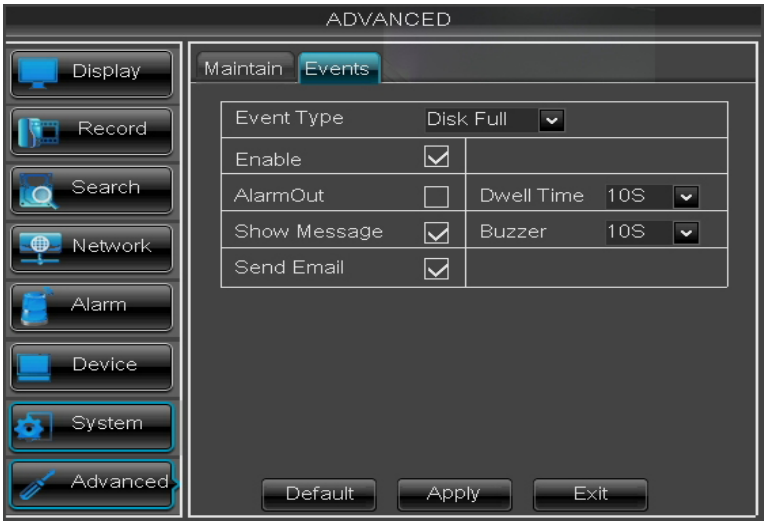
Parameter loaded, system will restart!

4.8.2 Events Settings

The Events page allows you to define the type of events for the DVR to issue an alarm.

1 In preview mode, right-click on the mouse to display the Pop-up menu.

2 Select **Main Menu** > **ADVANCED**, select the **Events** tab.



Event Type: Disk Full
Enable ☑
AlarmOut ☐
Dwell Time: 10S
Show Message ☑
Buzzer: 10S
Send Email ☑

3 Modify the necessary settings.

Menu Item	Description
Event Type	Select the event type. Options are: • **Disk Full**: When HDD is full. • **Disk Error**: If HDD is not detected properly. • **Video Loss**: If camera is not detected properly.
Enable	Select **Enable** to issue a notification when the event type occurs.
AlarmOut	If an alarm device is connected, check the box to make the device sound the alarm when the event occurs.
Dwell Time	Select the alarm duration (10S/20S/40S/60S).
Show Message	Check the box to display a message on the screen when the event occurs.
Buzzer	Set the buzzer duration when the event occurs (Off/10 S/20 S/40 S/60 S). To disable buzzer, select **Off**.
Send Email	Check to enable email alarm notification. If the function is enabled, the system will send the alarm to the specified email address. See "4.4.3 Email Settings" on page 54.

4 After all settings are complete, click **Apply**.

5 A warning message appears, click **OK** to confirm.

6 When data saving is complete, click **OK**.

Chapter 5: KGUARD Web Client

Use KGUARD Web Client to remotely access the DVR at anytime.

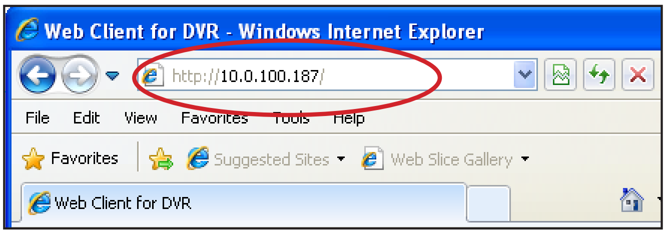
To access KGUARD Web Client you must ensure the following requirements are met:

- The Network settings of the DVR is properly configured. See "4.4 Setting the Network" on page 52.
- Your computer has a web browser, such as Internet Explorer or Safari, installed.

5.1 Login

KGUARD Web Client allows up to 3 simultaneous access. However, only one administrator account is allowed per access.

1 Open your computer web browser and enter the DVR IP address or domain name in the URL box. For example, see illustration below:



Web Client for DVR - Windows Internet Explorer

http://10.0.100.187/

Don't know the IP Address of your DVR?

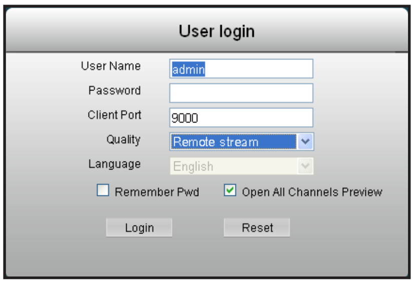
The IP address of the DVR vary depending on the network settings you configured in NETWORK menu (see "4.4 Setting the Network" on page 52).

- If your network type is DHCP, ask your network administrator for the IP address assigned to the DVR.
- If your network type is PPPoE, ask your Internet Service Provider (ISP) for the IP address assigned to the DVR.
- If your network type is Static IP, check the IP address you configured for **IP ADDR** in NETWORK menu.
- If the DVR is connected to a DDNS, check the Domain Name that you configured when you created the DDNS account and type the domain name in the URL box.

Note:

For MAC users, you may be prompted to install necessary plug-ins to access the KGUARD Web Client. Follow the on-screen instructions to complete the installation. When prompted for password entry, leave the password empty and select **Install**.

2 Enter the **User Name** and **Password**.



User login

User Name: admin

Password:

Client Port: 9000

Quality: Remote stream

Language: English

☐ Remember Pwd ☑ Open All Channels Preview

Note:

The default administrator **User Name** is "admin" and the password is 123456. We suggest you change the password to protect your privacy. To change the password, see "Changing the Password" on page 67.

3 If necessary, modify the **Client Port**, this should be the same port as configured in the Network Settings menu.

4 On **Quality**, select **Record setup** or **Remote stream**.

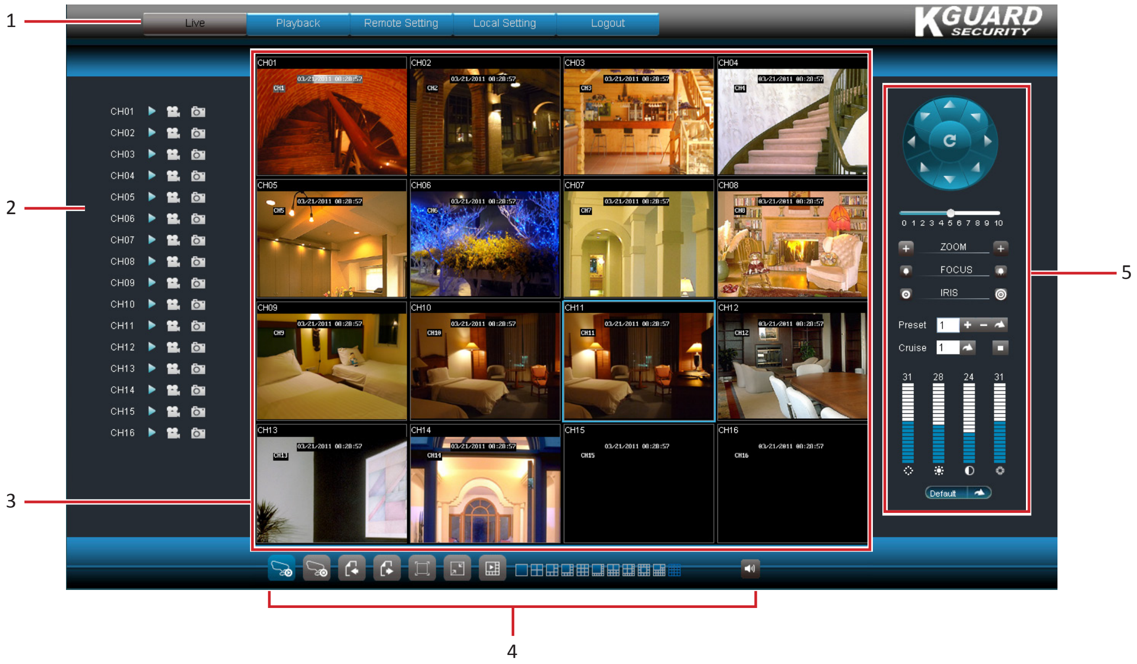
5 Click **Login**.

5.2 The Interface

After you login to KGUARD Web Client, the Live screen appears.

Note:

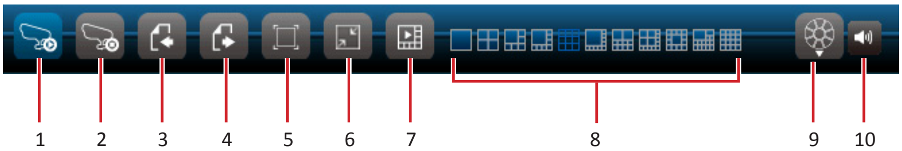
The number of channels displayed may vary depending on the DVR model. The illustration below is from a 16-channel DVR.


1
2
3
4
5
Live
Playback
Remote Setting
Local Setting
Logout
KGUARD SECURITY
CH01
CH02
CH03
CH04
CH05
CH06
CH07
CH08
CH09
CH10
CH11
CH12
CH13
CH14
CH15
CH16
ZOOM
FOCUS
IRIS
Preset
Cruise
Default

No.	Item	Description
1	**Main Menu**	Click a menu item to access. Options are: • **Live**: Allows you to view the Live screen, control PTZ view, and manage recording and playback options. See “5.3 Live Viewing” on page 78. • **Playback**: Allows you search, playback, and download recorded videos. See “5.4 Searching and Playing Recorded Videos” on page 82. • **Remote Setting**: Allows you to configure the DVR remotely. See “5.5 Remote Settings” on page 84. • **Local Setting**: Allows you to specify the local disk drive location to save recorded videos, captured screen shots, and downloaded videos. • **Logout**: Click to logout from KGUARD Web Client.
2	**Channel Controls**	Lists all channels that can be connected to the DVR. The icons of each channel are used to manage the channel, see “5.3.2 Viewing and Recording” on page 80.
3	**Display Screen**	Displays the channels in grid mode or full screen mode. To manage the display screen, see “5.3.1 Switching Screen Modes” on page 78.
4	**Display Controls**	Controls for playback, recording and switching screen modes.
5	**PTZ Controls**	Manages the PTZ speed dome. See “5.3.3 Using PTZ Controls” on page 81.

5.3 Live Viewing

From the Live screen, use the Display Controls to open or close the channels, adjust the volume, and switch between screen modes.

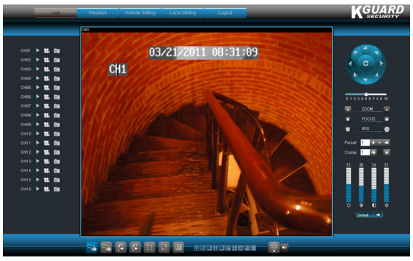
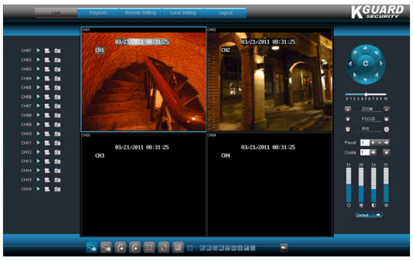
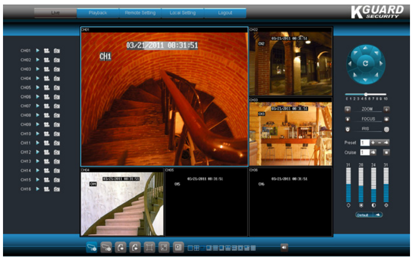


No.	Item		Description
1	**Open All Channels**		Click to open all channels for viewing.
2	**Close All Channels**		Click to close all channels for viewing.
3	**Previous**		Click to view the previous channels.
4	**Next**		Click to save the changes.
5	**Full Screen**		Click to view the channels in full screen.
6	**Stretch**		Click to stretch the screen. Click it again to return to the original proportions.
7	**Display / Hide Screen Modes**		Click to display or hide the screen mode icons.
8	**Screen Mode Icons**		Click a screen mode icon to switch the screen display. See "5.3.1 Switching Screen Modes" below.
9	**PTZ Control**		The PTZ Control icon appears only in full screen mode. Click to turn the PTZ control on or off. This function is applicable only if using a PTZ camera.
10	**Audio**		Turn off or turn on the audio.

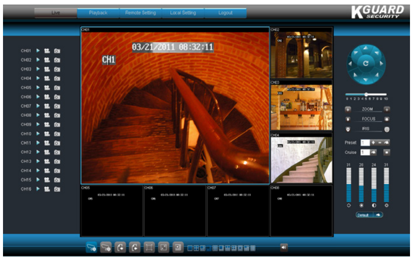
5.3.1 Switching Screen Modes

By default, a 9-channel grid display appears on the screen.

The Live screen can be viewed in different modes: 1-channel, 4-channel grid, 6-channel grid, 8-channel grid, 9-channel grid, 10-channel grid, 13-channel grid, 14-channel grid, 16-channel grid, and full screen.

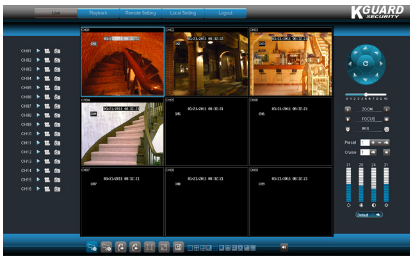
1-Channel	4-Channel Grid	6-Channel Grid
		
To view one channel at a time, do one of the following: • Double-click on the channel. Double-click again to return to grid display. • Click ■.	To view 4 channels on the grid, click ⊞.	To view 6 channels on the grid, click ▦.

8-Channel


KGUARD SECURITY

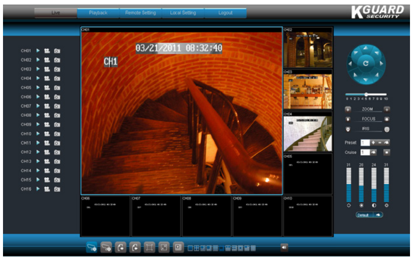
To view 8 channels on the grid, click ▦.

9-Channel Grid


KGUARD SECURITY

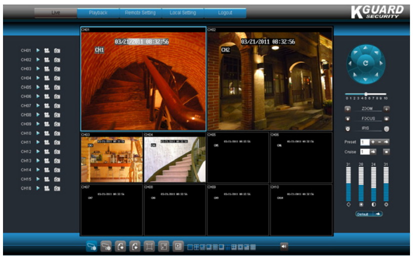
To view 9 channels on the grid, click ▦.

10-Channel Grid


KGUARD SECURITY

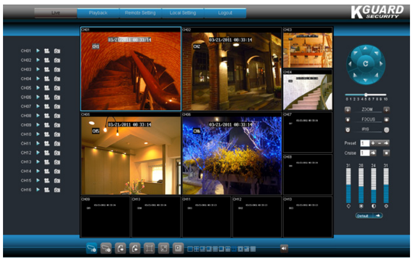
To view 10 channels on the grid, click ▦.

10-Channel Grid (2 Big Screens)


KGUARD SECURITY

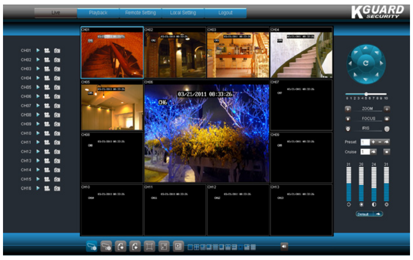
To view 10 channels with 2 channels bigger than the others, click ▦.

13-Channel Grid


KGUARD SECURITY

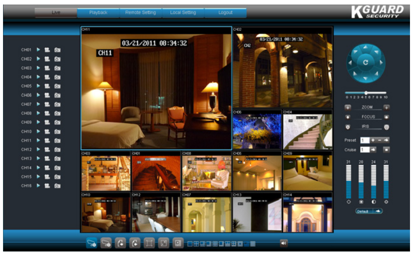
To view 13 channels on the grid, click ▦.

13-Channel Grid (Center)


KGUARD SECURITY

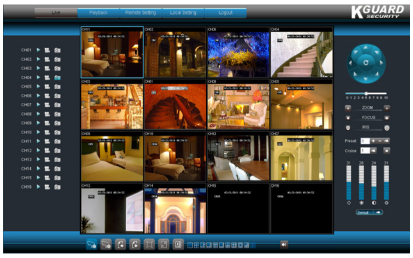
To view 13 channels with one channel on the center, click ▦.

14-Channel Grid


KGUARD SECURITY

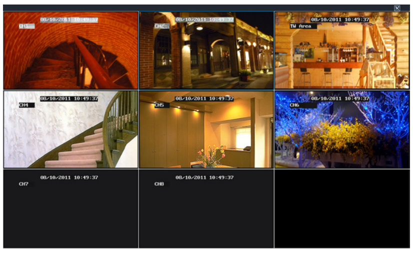
To view 14 channels, click ▦.

16-Channel Grid


KGUARD SECURITY

To view 16 channels on the grid, click ▦.

Full Screen Mode



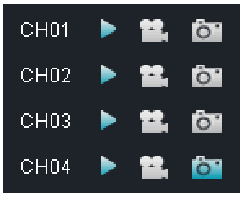
08/10/2011 10:50:26
CH2

- To view in full screen, click ⛶.
- Double-click a channel to further view one channel in full screen.
- To exit full screen mode, click the right mouse button and select **Exit full screen**.

5.3.2 Viewing and Recording

From the Live screen, you can choose to view or hide a channel display, start manual recording, and capture screen shots of a channel.

Use the Channel Controls to manage individual channels and the Display Controls to manage all the channels at the same time. Click the volume bar to adjust the volume.



Viewing or Hiding Channels

Click the view ▶ icon next to a channel to show or hide the channel display. The view icon indicates the current status:

- ▶ : The channel is displayed on the screen.
- ▶ : The channel is not displayed on the screen.

To display or hide all the channels, click the play or stop icons on the Play Controls.

Recording Channels Manually

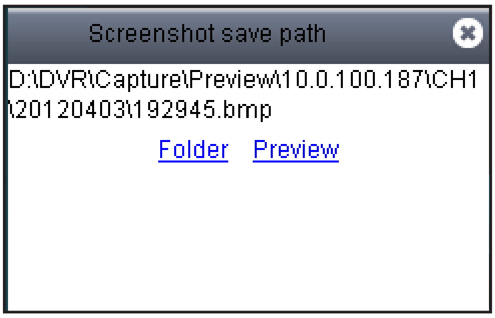
Click the recording 🎥 button next to a channel to start or stop manual recording. The recording icon indicates the current status:

- 🎥 : The channel is being recorded.
- 🎥 : The channel is not being recorded.

Taking Snapshots

Click the snapshot 📷 icon on the Play Controls to take a snapshot of the current screen. Snapshots are saved in a local directory path. To configure the local directory path, see “5.6 Local Settings” on page 106.

After taking a snapshot, a message appears on the screen to indicate where the snapshot is saved. Example as below:

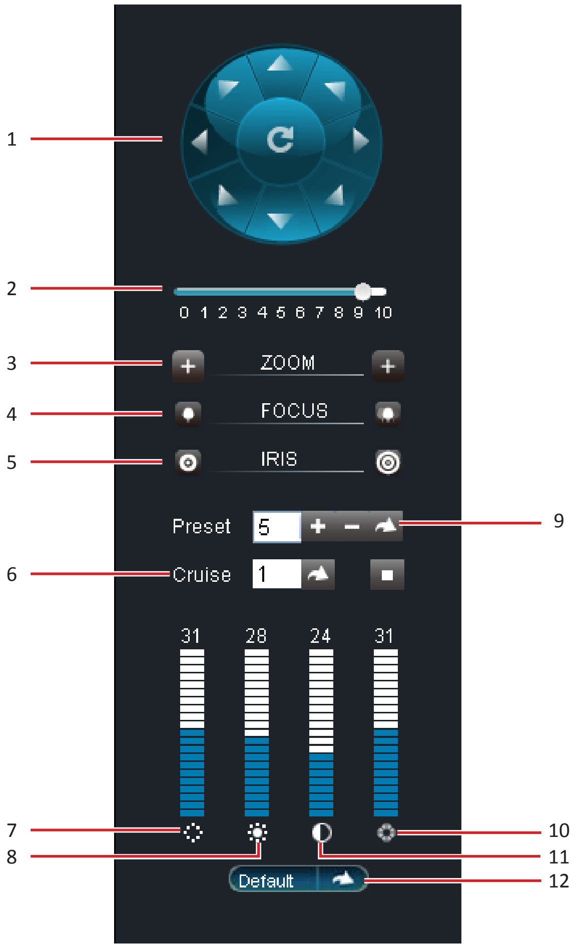


Screenshot save path

D:\DVR\Capture\Preview\10.0.100.187\CH1\20120403\192945.bmp

5.3.3 Using PTZ Controls

If you are using a PTZ speed dome camera, use the PTZ Controls to adjust the viewing scope other PTZ settings.



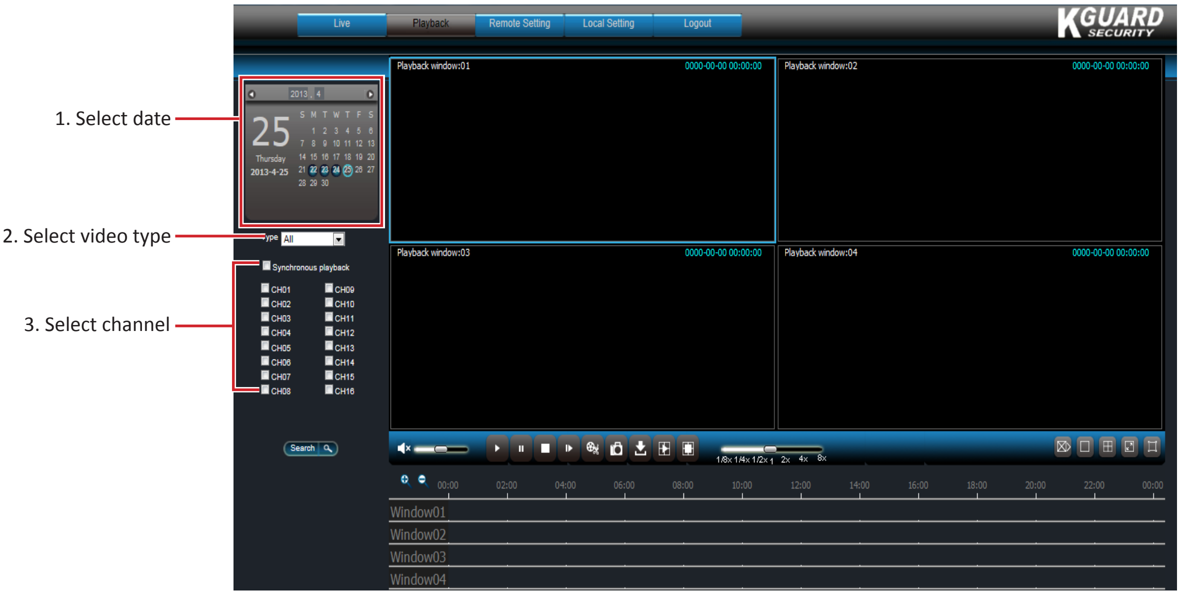
No.	Item	Description
1	**Pointer pan**	Click the direction arrows to select the direction of the PTZ camera. Click the middle icon to switch to auto pan.
2	**Speed**	Drag the slider to adjust speed.
3	**Zoom**	Click the icons to adjust the zoom setting.
4	**Focus**	Click the icons to adjust the focus setting.
5	**Iris**	Click the icons to adjust the iris setting.
6	**Cruise**	Click ➦ to start cruise. Click ■ to stop cruise.
7	**Hue**	Click on the bars to adjust the hue setting.
8	**Brightness**	Click on the bars to adjust the brightness setting.
9	**Preset**	Set the preset point, then click ➦ to go to the preset point.
10	**Saturation**	Click on the bars to adjust the saturation setting.
11	**Contrast**	Click on the bars to adjust the contrast setting.
12	**Default**	Click **Default** or ➦ to restore the default PTZ camera settings.

5.4 Searching and Playing Recorded Videos

You can remotely search, play, and download recorded videos.

5.4.1 Searching and Playing Videos

1 On the Main Menu, click **Playback**. The Playback screen appears.


1. Select date
2. Select video type
3. Select channel
Live
Playback
Remote Setting
Local Setting
Logout
KGUARD SECURITY
2013 4
25
Thursday
2013-4-25
Type All
Synchronous playback
CH01
CH02
CH03
CH04
CH05
CH06
CH07
CH08
CH09
CH10
CH11
CH12
CH13
CH14
CH15
CH16
Search
Playback window:01
Playback window:02
Playback window:03
Playback window:04
0000-00-00 00:00:00
1/8x 1/4x 1/2x 1 2x 4x 8x
Window01
Window02
Window03
Window04

2 Select a date from the calendar.

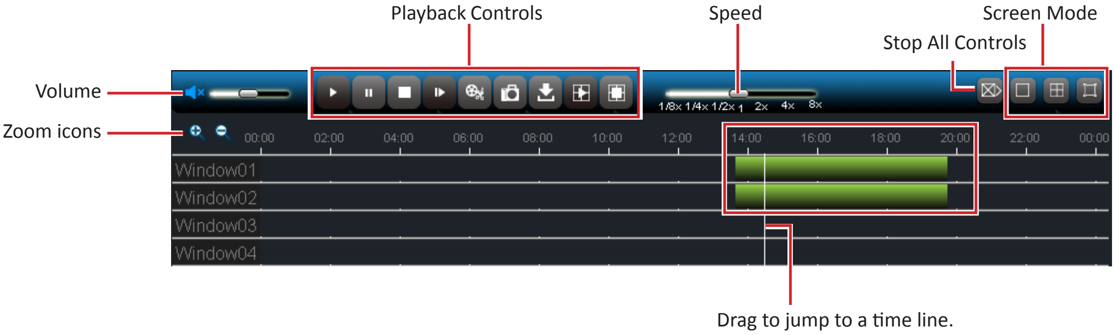
3 You can filter the search by recorded video type. Select the **Type**.

4 Check **Synchronous playback** to playback multiple channels at the same time.

Note:
You can only select up to 4 channels for simultaneous playback.

5 Select the channels that you want to search.

6 Click **Search**. Available recorded files are marked with green bars on the time line.


Playback Controls
Speed
Screen Mode
Stop All Controls
Volume
Zoom icons
1/8x 1/4x 1/2x 1 2x 4x 8x
00:00
02:00
04:00
06:00
08:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Window01
Window02
Window03
Window04
Drag to jump to a time line.

7 Click ▶ to play the recorded videos simultaneously.

8 Use the on-screen controls to manage the recorded videos.

« TIP »

- To jump to a time slot or fast-forward or rewind the playback, drag the white line across the green bars.
- Use the playback control buttons to pause/play and stop the playback.
- Drag the volume slider to adjust the volume.
- Click the zoom icons to zoom in or zoom out the time line.
- Drag the speed slider to change the playback speed.

- Click the screen mode icons to change to a 1-channel, 4-channel, or full screen display.
- Click the stop all controls icon then select an option. Options are: **Stop all playback**, **Stop all download**, **Stop all windows**.
- Click to capture a screenshot of the playback screen of the highlighted channel.

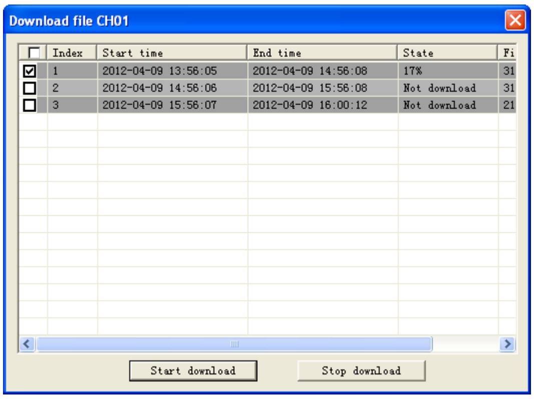
5.4.2 Downloading Recorded Videos

1 Search and play the video you want to download, see “5.4 Searching and Playing Recorded Videos” on page 82.

2 If multiple channels are played simultaneously, click on the channel that you want to download.

3 Click .

4 Select the box of the files that you want to download.



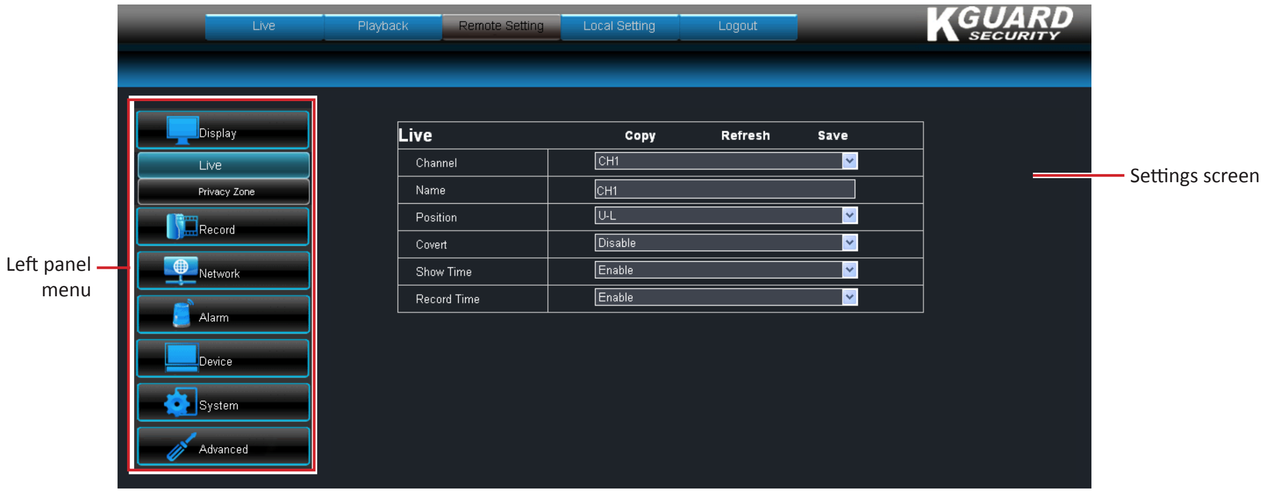
☐	Index	Start time	End time	State	Fi
☑	1	2012-04-09 13:56:05	2012-04-09 14:56:08	17%	31
☐	2	2012-04-09 14:56:06	2012-04-09 15:56:08	Not download	31
☐	3	2012-04-09 15:56:07	2012-04-09 16:00:12	Not download	21

5 Click **Start Download** to download the video to your local hard disk. See “5.6 Local Settings” on page 106 for details on setting download path folder.

5.5 Remote Settings

Use the Remote Setting menu to remotely configure the DVR. However, some functions are only accessible if you login with an administrator account.

On the Main Menu, click **Remote Setting** to access the Remote Setting page.



Live

Channel	CH1
Name	CH1
Position	U-L
Covert	Disable
Show Time	Enable
Record Time	Enable

Left panel menu

Settings screen

The Remote Setting menu is divided into seven submenu options:

- **Display**: Allows you to customize how channels are displayed on the monitor screen. See "5.5.1 Setting the Display" below.
- **Record**: Allows you to customize the recording settings and schedule. See "5.5.3 Setting the Recording" on page 87.
- **Network**: Allows you to customize network settings, including email setup. See "5.5.4 Setting the Network Configuration" on page 90.
- **Alarm**: Allows you to customize alarms and set when and how you want to be notified. See "5.5.5 Setting the Alarm" on page 96.
- **Device**: Allows you to customize settings for the hard disk drive, PTZ speed dome, mobile, and motion detection. See "5.5.6 Setting the Device" on page 99.
- **System**: Allows you to setup user accounts and password, set the system date and time, and view the device information. See "5.5.7 Managing System Settings" on page 100.
- **Advanced**: Allows you to upgrade the firmware, restore default settings or configure events and maintenance options.

To access a submenu option, click an item from the left panel. The tree expands to show more options.

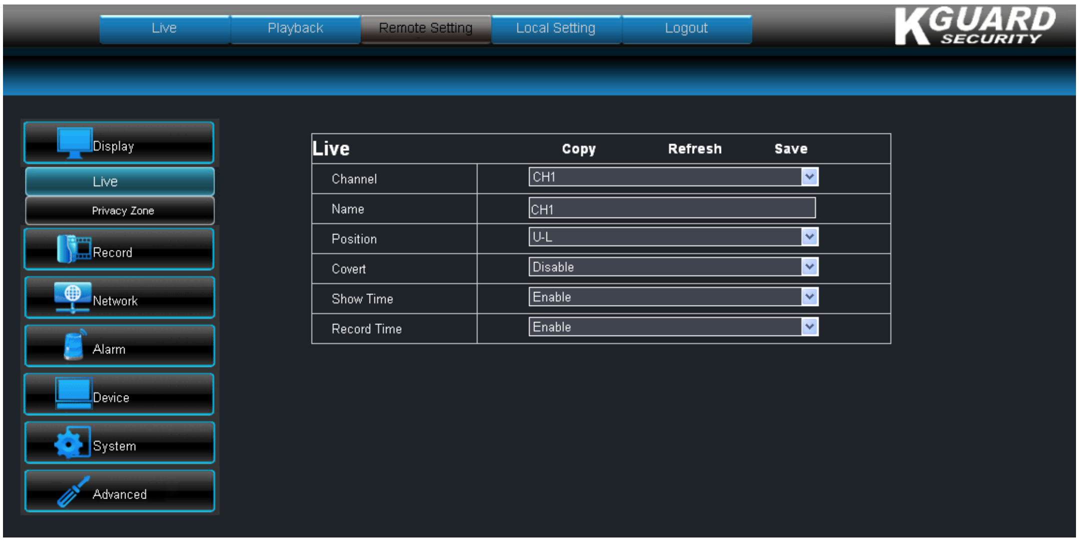
5.5.1 Setting the Display

Use the Display menu to remotely customize how you want the channels to be displayed on screen, enable live viewing and set the window position of a channel. You can also customize the channel name that is displayed on the screen.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Display**.

3 Modify the necessary settings.


Live
Playback
Remote Setting
Local Setting
Logout
KGUARD SECURITY
Display
Live
Privacy Zone
Record
Network
Alarm
Device
System
Advanced
Copy
Refresh
Save

Live	
Channel	CH1
Name	CH1
Position	U-L
Covert	Disable
Show Time	Enable
Record Time	Enable

Item	Description
Channel	Select the channel that you want to configure.
Name	Enter the desired channel name to be displayed on the screen.
Position	Set the channel name location on the screen. Options are: • U-L: Upper left • D-L: Down left • U-R: Upper right • D-R : Down right • Close: Select this option to hide the channel name.
Covert	Display or hide live view display of channel. Select **Disable** to view the channel.
Show Time	Enable/Disable live view time display.
Record Time	Enable/Disable record time display.

4 To save the settings, click **Save**.

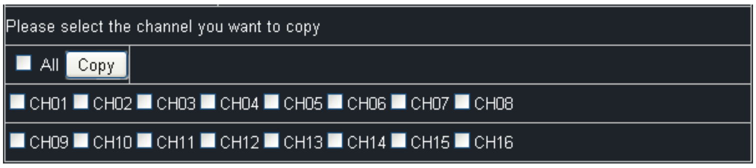
« TIP »

- To apply the same settings to other channels (except the channel name), click **Copy**. See "Copying Settings To Other Channels" below.
- To cancel any modifications and retain the existing settings, click **Refresh** at the bottom of the screen.

Copying Settings To Other Channels

The settings of one channel can be copied to another or to all channels. To do this, perform the following:

1 After modifying the settings, click **Copy**. The screen below appears.


Please select the channel you want to copy

☐ All Copy

☐ CH01 ☐ CH02 ☐ CH03 ☐ CH04 ☐ CH05 ☐ CH06 ☐ CH07 ☐ CH08

☐ CH09 ☐ CH10 ☐ CH11 ☐ CH12 ☐ CH13 ☐ CH14 ☐ CH15 ☐ CH16

2 Select the channels you want to copy the settings to. To copy to all channels, click **All**.

3 Click **Copy** to copy.

5.5.2 Privacy Zone Settings

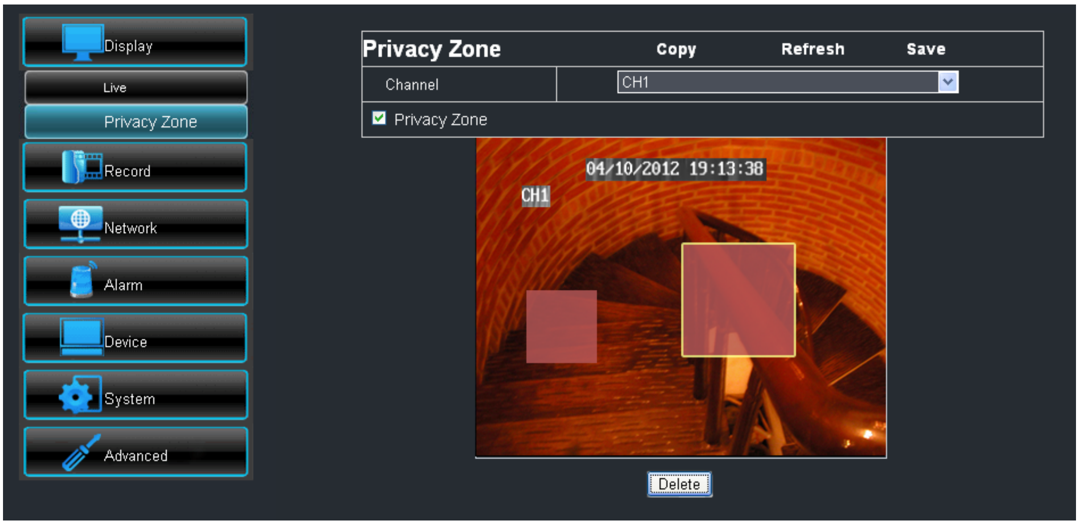
You can mask up to 4 areas to hide it from being viewed on the screen.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Display > Privacy Zone**.

3 Select the channel.

4 Check the **Privacy Zone** box to enable the function.


Display
Live
Privacy Zone
Record
Network
Alarm
Device
System
Advanced
Privacy Zone
Copy
Refresh
Save
04/10/2012 19:13:38
CH1
Delete

Channel CH1

☑ Privacy Zone

5 Click and drag the mouse to box an area on the screen to mask.

6 To mask more areas, repeat step 5. You can mask up to 4 areas.

Note:

- The above illustration is an example of two marked areas.
- Once the mouse button is released, you cannot resize the box anymore. To modify the masked area, click the box (yellow highlight), then click **Delete** to delete the masked area and then redo step 5 to create another mask.

7 When done, click **Save**.

« TIP »

- To apply the same settings to other channels, click **Copy**. See "Copying Settings To Other Channels" on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

5.5.3 Setting the Recording

Use the Record menu to remotely set the recording schedule and customize the recording settings, such as frame rate, quality, and resolution.

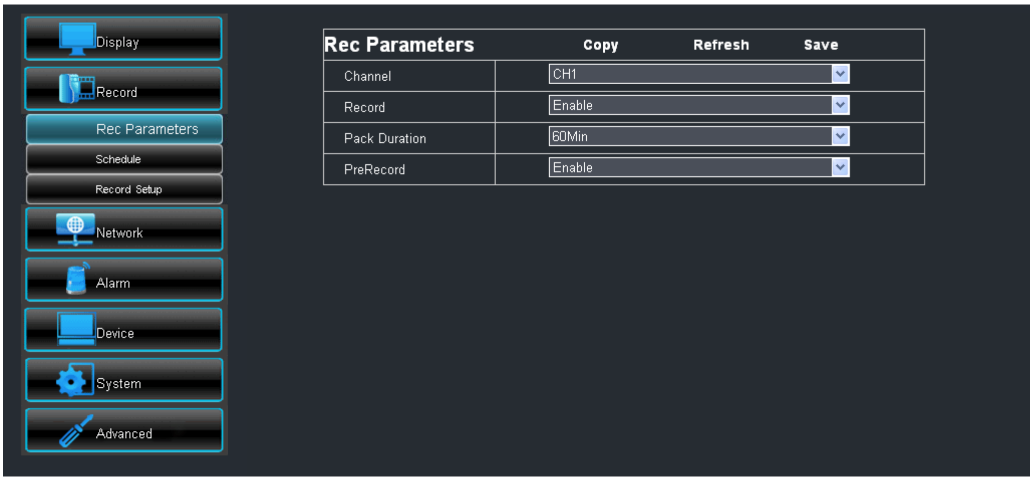
Setting the Recording Parameters

Use the recording parameters screen to recording file size, duration, etc.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Record**.

3 Modify the necessary settings.



Rec Parameters

Channel: CH1

Record: Enable

Pack Duration: 60Min

PreRecord: Enable

Item	Description
Channel	Select the channel that you want to configure.
Record	Enable/Disable recording.
Pack Duration	Set the recording length for each video file (15/30/45/60 minutes). When the time elapsed, the recording is saved to another file.
PreRecord	Enable/Disable recording prior to the set recording time.

4 To save the settings, click **Save**.

« TIP »

- To apply the same recording settings to other channels, click **Copy**. See "Copying Settings To Other Channels" on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

Setting the Recording Schedule

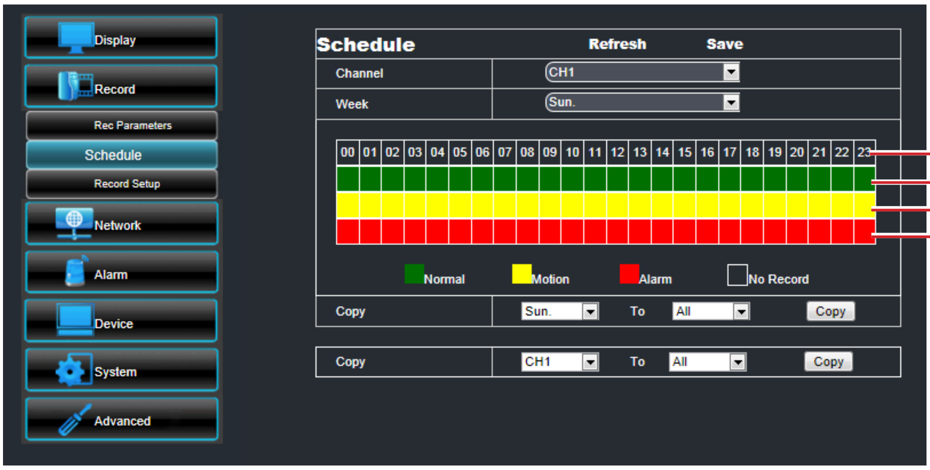
To automatically record a channel at a specified time, do the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Record > Schedule**. The Schedule screen appears.

3 On **Channel**, select the channel.

4 On **Week**, select the day of the week.


Display
Record
Rec Parameters
Schedule
Record Setup
Network
Alarm
Device
System
Advanced
Schedule
Refresh
Save
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Normal
Motion
Alarm
No Record
Copy
To
Copy

Channel: CH1

Week: Sun.

Copy: Sun. To: All

Copy: CH1 To: All

Time (24-hour format)

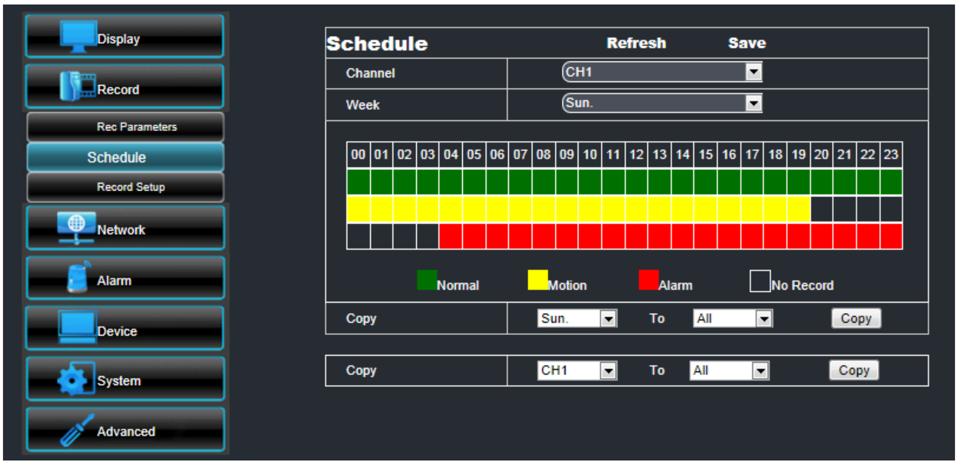
Slot for Normal recording

Slot for Motion recording

Slot for Alarm recording
(on 16-channel DVR only)

5 Click a space on the grid to mark the schedule. The space changes color depending on the selected record type. Click as many spaces as desired.

- **Normal**: To record the video within the specified time.
- **Motion**: To record the video only when motion is detected.
- **Alarm**: To record the video only when the alarm is triggered within the specified time. If the alarm is not triggered, the recording is not performed. See "5.5.5 Setting the Alarm" on page 96 for further details.


Display
Record
Rec Parameters
Schedule
Record Setup
Network
Alarm
Device
System
Advanced
Schedule
Refresh
Save
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Normal
Motion
Alarm
No Record
Copy
To
Copy

Channel: CH1

Week: Sun.

Copy: Sun. To: All

Copy: CH1 To: All

🟩 Normal recording is set

🟥 Alarm recording is set

🟨 Motion recording is set

⬛ No scheduled recording

« TIP »

To copy the same schedule from one day to another, select the source day on the **Copy** field, then select the target day on the **To** field, then click **Copy**.

6 To save the schedule, click **Save**.

« TIP »

- To apply the same recording settings to other channels, click **Copy**. See "Copying Settings To Other Channels" on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

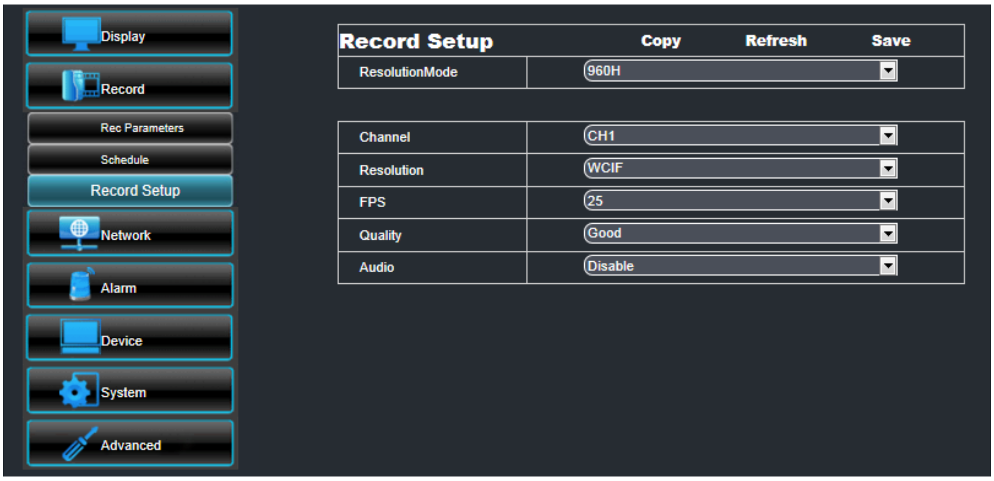
Record Setup Settings

To configure the record setup settings, do the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Record > Record Setup**. The Record Setup screen appears.

3 Modify the necessary settings.



Record Setup

ResolutionMode: 960H

Channel: CH1

Resolution: WCIF

FPS: 25

Quality: Good

Audio: Disable

Item	Description
Resolution Mode	Select the type of record mode. **Note:** If the record mode setting is set to 960H, it is recommended to use a 600 TVL or higher resolution camera.
Channel	Select the channel that you want to configure.
Resolution	Set the recording resolution.
FPS	Select the frame rate value between 1 to 30.
Quality	Select the recording quality.
Audio	Enable/Disable recording with audio.

4 To save the settings, click **Save**.

« TIP »

- To apply the same recording settings to other channels, click **Copy**. See "Copying Settings To Other Channels" on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

5.5.4 Setting the Network Configuration

You can use the Network menu to setup how the DVR connects to the network. It provides 3 network connection options: Static IP, DHCP, and PPPoE.

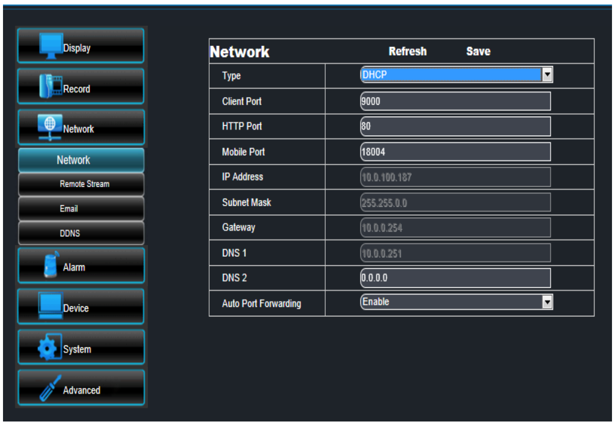
Note:
Consult your network administrator or the Internet Service Provider (ISP) to determine the type of connection you are using and the required parameters to complete the setup.

Network Settings

To configure the network settings, do the following:

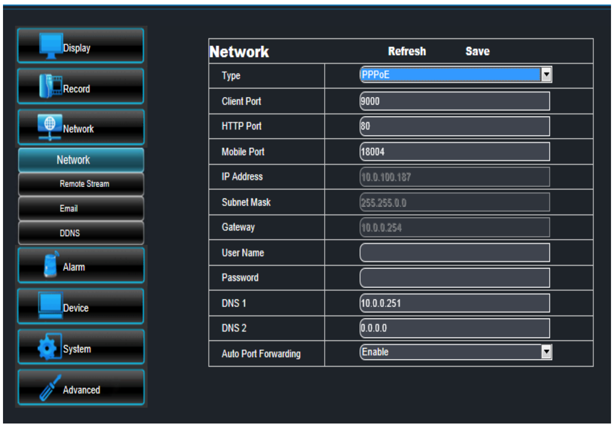
1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Network > Network**. The Network screen appears.


Display
Record
Network
Network
Remote Stream
Email
DDNS
Alarm
Device
System
Advanced
Network
Refresh
Save

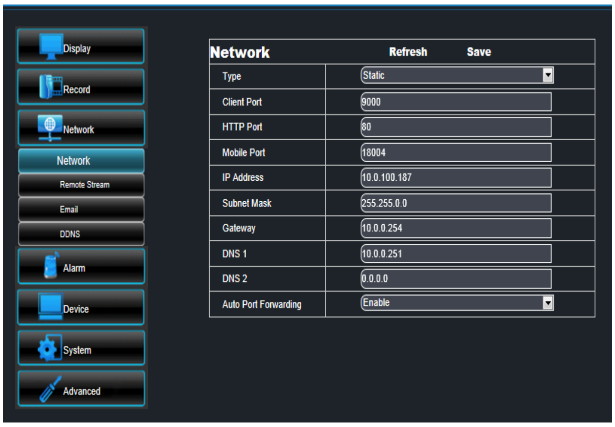
Type	DHCP
Client Port	9000
HTTP Port	80
Mobile Port	18004
IP Address	10.0.100.187
Subnet Mask	255.255.0.0
Gateway	10.0.0.254
DNS 1	10.0.0.251
DNS 2	0.0.0.0
Auto Port Forwarding	Enable

- **DCHP**: With Dynamic Host Configuration Protocol (DHCP) service, your router will automatically assign an IP address to your computer connected to the network.


Display
Record
Network
Network
Remote Stream
Email
DDNS
Alarm
Device
System
Advanced
Network
Refresh
Save

Type	PPPoE
Client Port	9000
HTTP Port	80
Mobile Port	18004
IP Address	10.0.100.187
Subnet Mask	255.255.0.0
Gateway	10.0.0.254
User Name	
Password	
DNS 1	10.0.0.251
DNS 2	0.0.0.0
Auto Port Forwarding	Enable

- **PPPoE:** The Point-to-Point Protocol over Ethernet (PPPoE) is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames. This network protocol allows the device to be directly connected using a DSL modem.


Display
Record
Network
Network
Remote Stream
Email
DDNS
Alarm
Device
System
Advanced
Network
Refresh
Save

Type	Static
Client Port	9000
HTTP Port	80
Mobile Port	18004
IP Address	10.0.100.187
Subnet Mask	255.255.0.0
Gateway	10.0.0.254
DNS 1	10.0.0.251
DNS 2	0.0.0.0
Auto Port Forwarding	Enable

- **Static IP**: This network protocol allows you to configure the network interface using a fixed IP address.

3 Specify the **Client Port** and **HTTP Port** numbers.

- Client Port: Specify the port number that the device will use to send DVR command and video stream.
- HTTP Port: Specify the port number that you will use to log in to the device.

Note:
- Obtain these information from your network administrator or your Internet Service Provider (ISP).

- If you cannot use the either of the two default ports, 80 or 9000, the specified port may be occupied by other programs or it is being blocked by your service provider. Enter other port number. In this case, you need to add the port number after the IP address. For example, if you set the **HTTP Port** as 85, you need to enter the IP address as "192.168.3.103:85".

4 Enter other parameter settings (if applicable).

- If your network connection is **Static**, specify the static IP address, Subnet Mask, Gateway, and DNS 1/DNS 2 IP addresses.
- If your network connection is **PPPoE**, enter the User Name and Password that you setup with your DSL service provider. Then, specify the DNS 1/DNS 2 IP addresses.

Note:

The system supports two DNS server input options: DNS Server1 for main server and DNS Server2 for sub server.

Please contact your local ISP (Internet Service Provider) to obtain the correct DNS Server parameter.

5 To enable **Auto Port Forwarding (UPNP)** feature, select **Enable**.

Note:

Not all routers support the Auto Port Forwarding feature. If this function does not work, you must manually open the ports in your router.

6 After all settings are complete, click **Save**.

« TIP »

To cancel any modifications and retain the existing settings, click **Refresh**.

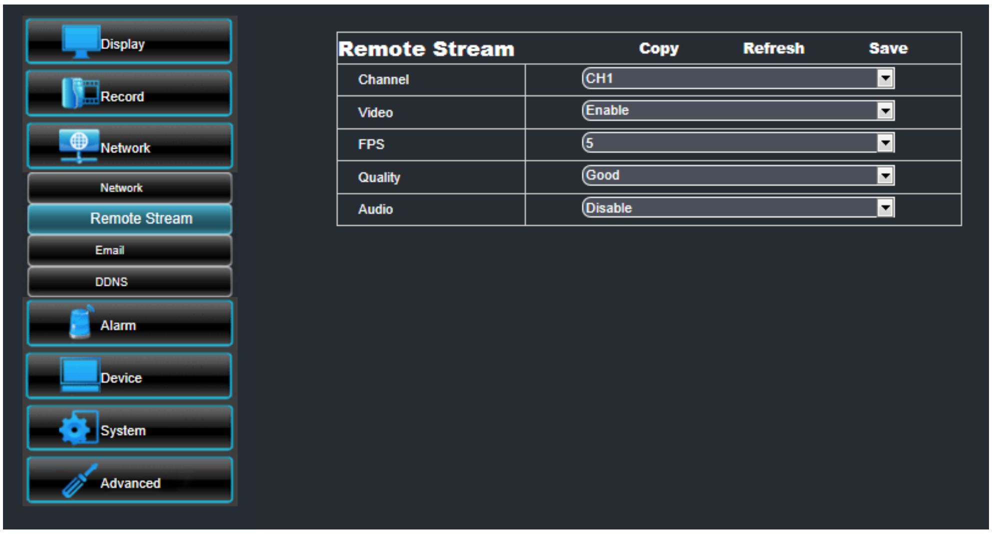
Setting the Remote Stream

To configure the remote stream settings, do the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Network > Remote Stream**. The Remote Stream screen appears.

3 Modify the necessary settings.


Display
Record
Network
Network
Remote Stream
Email
DDNS
Alarm
Device
System
Advanced
Remote Stream
Copy
Refresh
Save

Channel	CH1
Video	Enable
FPS	5
Quality	Good
Audio	Disable

Item	Description
Channel	Select the channel that you want to configure.
Video	Enable/Disable video display on the remote stream.
FPS	Select the frame rate value between 1 to 30.
Quality	Select the stream quality.
Audio	Enable/Disable remote stream with audio.

4 To save the settings, click **Save**.

« TIP »

- To apply the same settings to other channels, click **Copy**. See "Copying Settings To Other Channels" on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

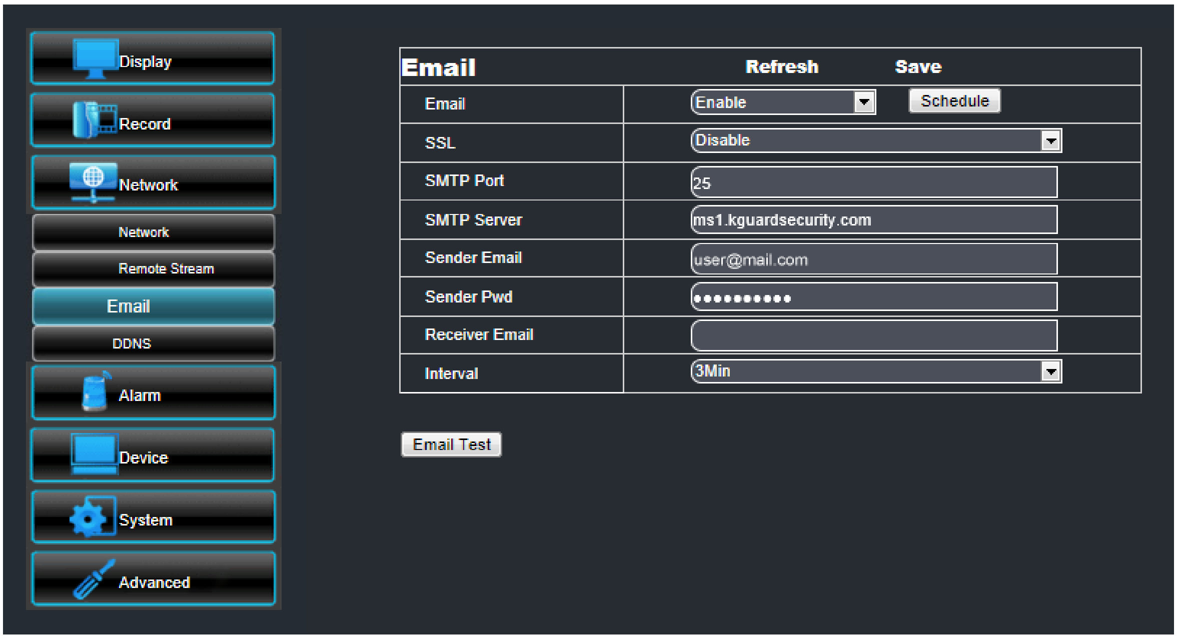
Setting the Email

Use the Email menu to configure the sending and receiving email servers to send and receive email alarm notifications.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Network** > **Email**.

3 Modify the necessary settings.



Email	Enable
SSL	Disable
SMTP Port	25
SMTP Server	ms1.kguardsecurity.com
Sender Email	user@mail.com
Sender Pwd	••••••••••
Receiver Email	
Interval	3Min

Menu item	Description
Email	Enable/Disable email configuration.
Schedule	Implement the email schedule.
SSL	SSL (Secure Sockets Layer) protocol is used to secure your email account. Enable **SSL** if the email server needs the SSL verification. Check with your email service provider for the applicable setting.
SMTP Port	Enter the SMTP port of the email server that you want to use to send emails. **Note:** By default, the SMTP port is 25 for email without SSL verification. For Gmail server or for email that needs SSL verification, the SMTP port is 465, by default. Check with your email service provider for the correct setting.
SMTP Server	Enter the SMTP server of the email server that you want to use to send emails.
Sender Email	Enter the email address from where you want to send the email.
Sender Pwd	Enter the sender's email password.
Receiver Email	Enter the email address where you want to send the email alarm notification.
Interval	Select the interval time between sending of emails (1/3/5/10 Minute).

4 After all settings are complete, click **Save**.

5 To test the configuration, click **Email Test**.

« TIP »

To cancel any modifications and retain the existing settings, click **Refresh**.

Email Schedule Setup

Set the email notification to be sent at the specified time. To configure email schedule setup, do the following:

1 On the Main Menu, click **Remote Setting**.

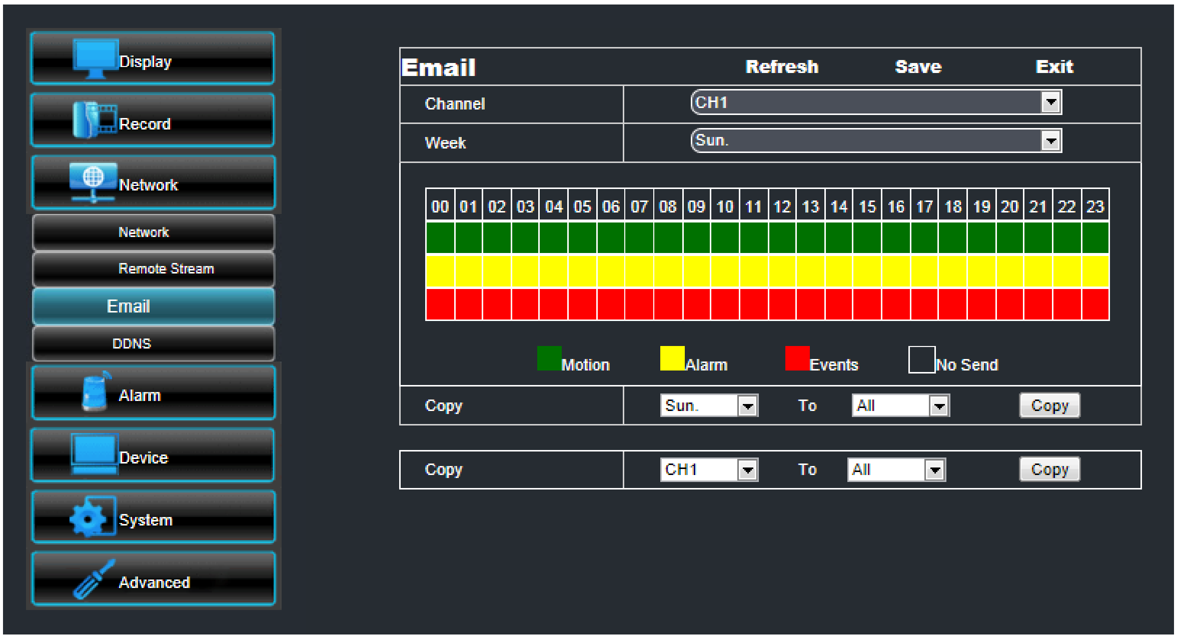
2 On the left panel, click **Network** > **Email**.

3 Click **Schedule**.

4 On **Channel**, select the channel you want to set the schedule.

5 On **Week**, select the days of the week to implement the schedule.

6 The number labels on top of the grid indicates the time of the day. Click a box to mark the schedule.



Channel: CH1

Week: Sun.

Copy: Sun. To All

Copy: CH1 To All

Display
Record
Network
Network
Remote Stream
Email
DDNS
Alarm
Device
System
Advanced
Email
Refresh
Save
Exit
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
🟩 Motion
🟨 Alarm
🟥 Events
☐ No Send
Copy
Copy

Note:
Alarm is only available for 16-channel only.

7 To remove a marked schedule, click the box again. The box turns gray.

8 After all settings are complete, click **Apply**.

« TIP »

- To copy the current settings to other days, select the day, then click **Copy**.
- To copy the current settings to other channels, select the channel, then click **Copy**.

9 After all settings are complete, click **Save**.

« TIP »

To cancel any modifications and retain the existing settings, click **Refresh**.

Setting Up DDNS

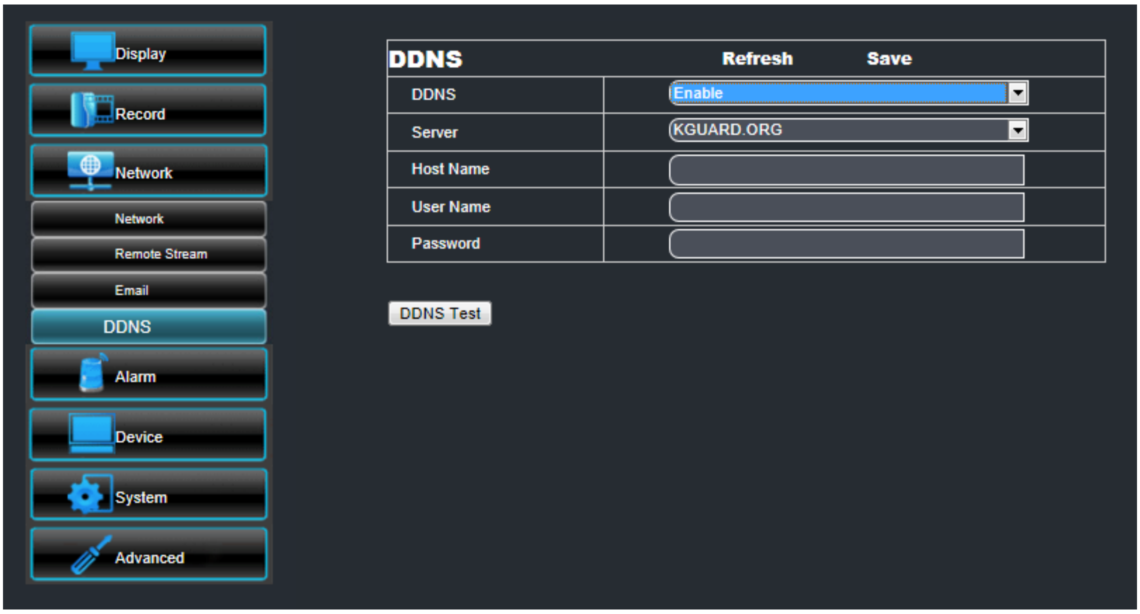
DDNS (Dynamic DNS) is a service that registers a domain name and the floating IP address with a DDNS server so that the domain name can be routed to the IP address even if the IP is changed in a dynamic IP system.

To use this feature, you must have a DDNS account. Obtain the information from your Internet Service Provider (ISP) or create a free DDNS account with KGUARD.org server, visit the website http://www.kguard.org.

To setup DDNS, do the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Network** > **DDNS**. The DDNS screen appears.



DDNS	Enable
Server	KGUARD.ORG
Host Name	
User Name	
Password	

3 Enable **DDNS**.

4 On **Server**, select the DDNS server.

5 On **Host Name**, enter the domain name you registered on DDNS server.

> **Note:**
> If the registered domain name is 123ABC, the IP address you type on IE or Safari when you browse Kguard Web Client is http://123ABC.KGUARD.ORG.

6 Enter the DDNS **User Name** and **Password**.

7 After all settings are complete, click **Save**.

8 To test the configuration, click **DDNS Test**.

> « TIP »
> To cancel any modifications and retain the existing settings, click **Refresh**.

Note:
To apply for a free DDNS account on http://www.kguard.org.

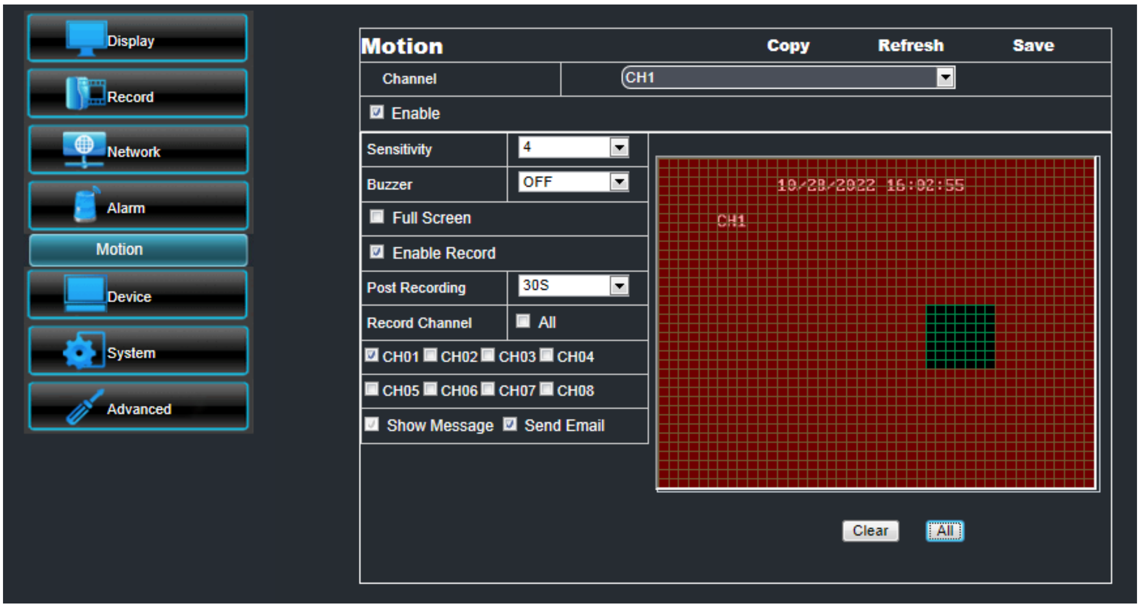
5.5.5 Setting the Alarm

Use the Alarm menu to select when to trigger the alarm and choose the alarm notification, such as buzzer sound, email, or full screen notification.

Setting Motion Detection

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Alarm > Motion**. The Motion screen appears.


Display
Record
Network
Alarm
Motion
Device
System
Advanced
Motion
Copy
Refresh
Save
10/28/2022 16:02:55
CH1
Clear
All

Channel: CH1

☑ Enable

Sensitivity: 4

Buzzer: OFF

☐ Full Screen

☑ Enable Record

Post Recording: 30S

Record Channel: ☐ All

☑ CH01 ☐ CH02 ☐ CH03 ☐ CH04

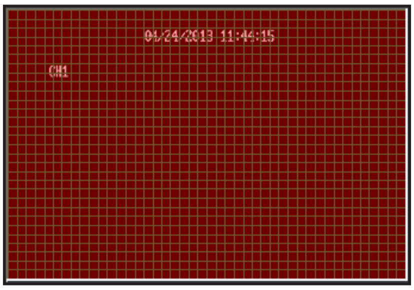
☐ CH05 ☐ CH06 ☐ CH07 ☐ CH08

☑ Show Message ☑ Send Email

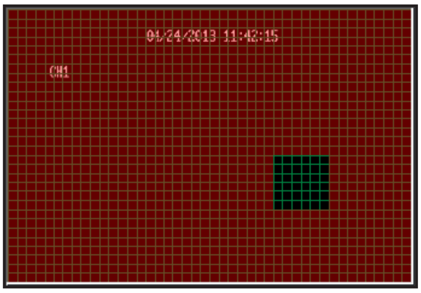
3 On **Channel**, select the channel where you want to setup motion detection.

4 Check the **Enable** box to enable motion detection.

5 By default, the whole screen is marked for motion detection (red block).


04/24/2013 11:44:15
CH1

6 To disable motion detection on an area, click a block and then drag the mouse to highlight the scope that you want to unmark (gray block). Or, click **Clear** to unmark all areas and then select a new area to mark for motion detection.


04/24/2013 11:42:15
CH1

🟥 Area is marked for motion detection

⬛ Area is unmarked for motion detection

7 Modify the necessary settings:

Menu item	Description
Sensitivity	Select the motion detection sensitivity rate. Options are : 1~8, wherein “8” is the most sensitive and “1” is the least sensitive.
Buzzer	Set the buzzer duration when motion is detected (Off/10 S/20 S/40 S/60 S). To disable buzzer, select **Off**.
Full Screen	Check the box to enable this function. If this function is enabled and the alarm is triggered, the corresponding channel will be displayed in full screen.
Alarm Out	If an alarm device is connected, check the box to make the device sound the alarm when triggered.
Dwell Time	Select the alarm sound duration (10S/20S/40S/60S) then check to apply the setting.
Enable Record	Check the box to enable the post recording option.
Post Recording	Select the post recording duration. **Enable Record** must be checked to use this function.
Record Channel	Check the box to enable recording of all or selected channels once motion detection is triggered. Then, select the channels to record.
Show Message	Check the box to display a message on screen when the alarm is triggered.
Send Email	Check to enable email alarm notification. If the function is enabled, the system will send the alarm images to the specified email address.

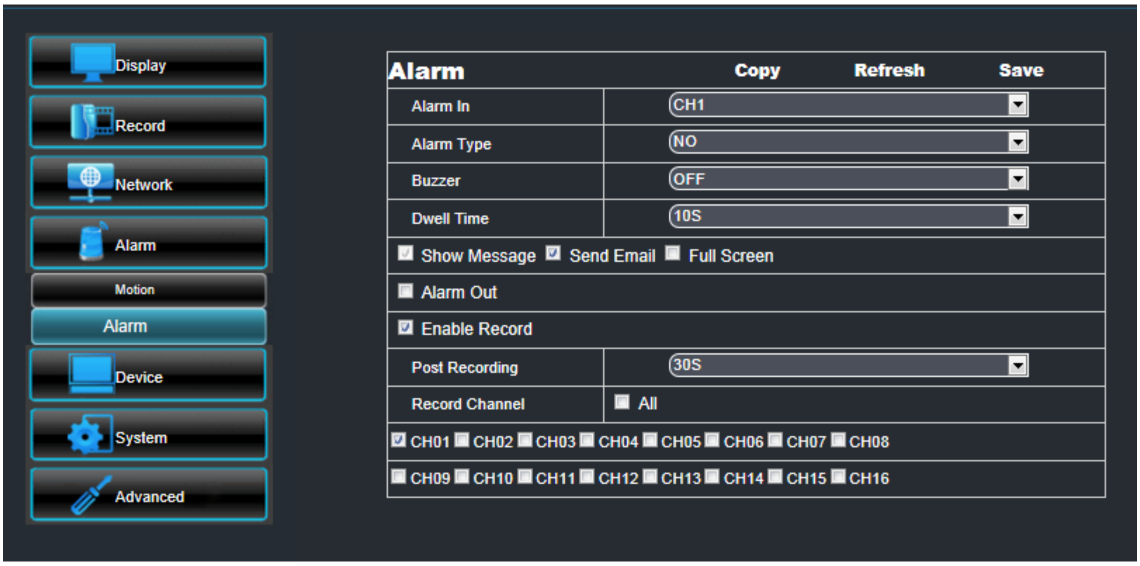
8 To save the settings, click **Apply** at the bottom of the screen.

When motion detection is enabled on a channel, the motion detection icon M appears on the channel screen shown on the monitor connected to the DVR.

Setting the Alarm Notification (16-Channel only)

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Alarm > Alarm**. The Alarm screen appears.



Alarm In: CH1
Alarm Type: NO
Buzzer: OFF
Dwell Time: 10S
☑ Show Message ☑ Send Email ☐ Full Screen
☐ Alarm Out
☑ Enable Record
Post Recording: 30S
Record Channel: ☐ All
☑ CH01 ☐ CH02 ☐ CH03 ☐ CH04 ☐ CH05 ☐ CH06 ☐ CH07 ☐ CH08
☐ CH09 ☐ CH10 ☐ CH11 ☐ CH12 ☐ CH13 ☐ CH14 ☐ CH15 ☐ CH16

3 Modify the necessary settings:

Menu item	Description
Alarm In	Select the channel that will trigger the alarm.
Alarm Type	Select the alarm type: **NO** (Normal-Open), **NC** (Normal-Close), or **OFF**.
Buzzer	Set the buzzer duration when alarm is triggered (Off/10 S/20 S/40 S/60 S). To disable the buzzer, select **Off**.

Dwell Time	Select the alarm sound duration of the I/O alarm device (10S/20S/40S/60S) then check to apply the setting to each alarm type.
Show Message	Check the box to display a message on screen when the alarm is triggered.
Send Email	Check to enable email alarm notification. If the function is enabled, the system will send the alarm images to the specified email address. See "4.4.3 Email Settings" on page 54.
Full Screen	Check the box to enable this function. If this function is enabled and the alarm is triggered, the corresponding channel will be displayed in full screen. Select the screen display duration (1 S/3 S/5 S/7 S/10 S)
Alarm Out	If an alarm device is connected, check the box to make the device sound the alarm when triggered.
Enable Record	Check the box to enable the post recording option.
Post Recording	Select the post-recording duration.
Record Channel	Check the box to enable recording and then select the channels to record when the alarm is triggered.

4 After all settings are complete, click **Save**.

« TIP »

- To apply the same recording settings to other channels, click **Copy**. See "Copying Settings To Other Channels" on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

5.5.6 Setting the Device

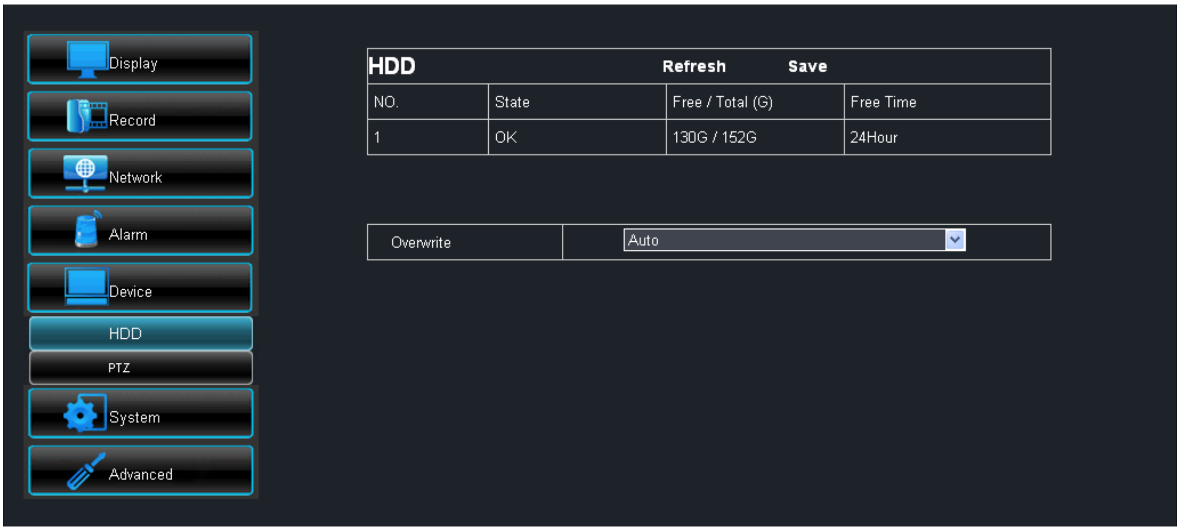
Use the Device menu to view the hard disk information and setup PTZ.

HDD Setup

You can remotely view the hard disk information and select an overwrite option. To do this, perform the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Device > HDD**. The HDD screen appears. The information about the installed hard disk(s) on the DVR are shown.



HDD

NO.	State	Free / Total (G)	Free Time
1	OK	130G / 152G	24Hour

Overwrite	Auto

3 To select an overwrite option, select the hard disk drive from the table (if more than one is installed).

4 On **Overwrite**, select an overwrite interval option (Close/Auto/1 Hour/3 Hours/1 Day/7 Days/30 Days/90 Days).

Note:
If **Overwrite** is set to Close, the recording will stop once the hard disk drive is full.

5 After all settings are complete, click **Save**.

« TIP »
To cancel any modifications and retain the existing settings, click **Refresh**.

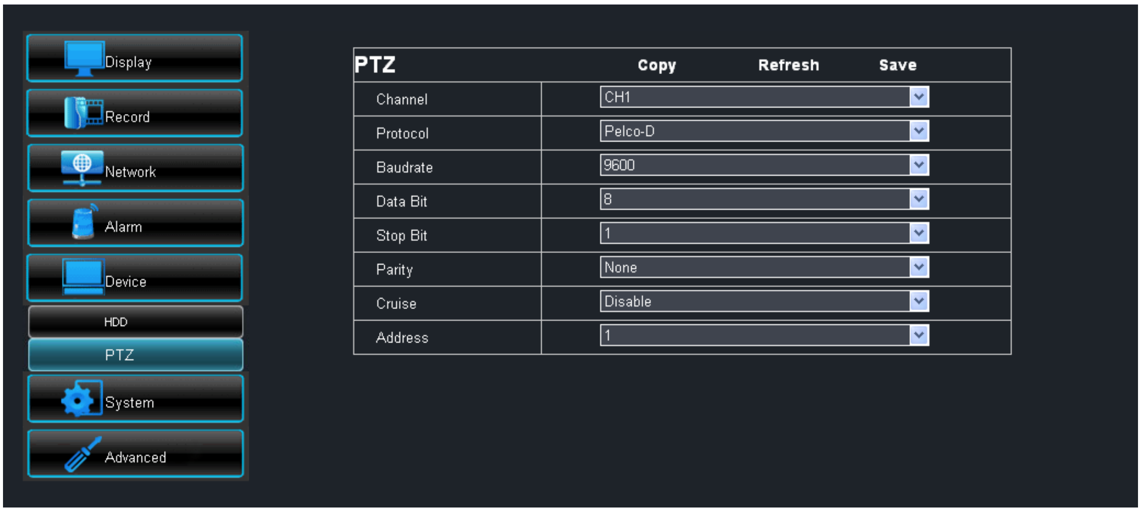
PTZ Setup

When a PTZ camera is installed, use the PTZ Setup menu to customize its settings.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Device** > **PTZ**. The PTZ screen appears.

3 On **Channel**, select the channel where the PTZ camera is installed.


Display
Record
Network
Alarm
Device
HDD
PTZ
System
Advanced
Copy
Refresh
Save

PTZ

Channel	CH1
Protocol	Pelco-D
Baudrate	9600
Data Bit	8
Stop Bit	1
Parity	None
Cruise	Disable
Address	1

4 Set the **Protocol**, **Baudrate**, **Data Bits**, **Stop Bits**, and **Parity**.

Note:
Check the PTZ camera specifications for the correct settings.

5 Enable or disable **Cruise**.

6 Set the **Address**.

7 After all settings are complete, click **Save**.

« TIP »

- To apply the same recording settings to other channels, click **Copy**. See “Copying Settings To Other Channels” on page 85.
- To cancel any modifications and retain the existing settings, click **Refresh**.

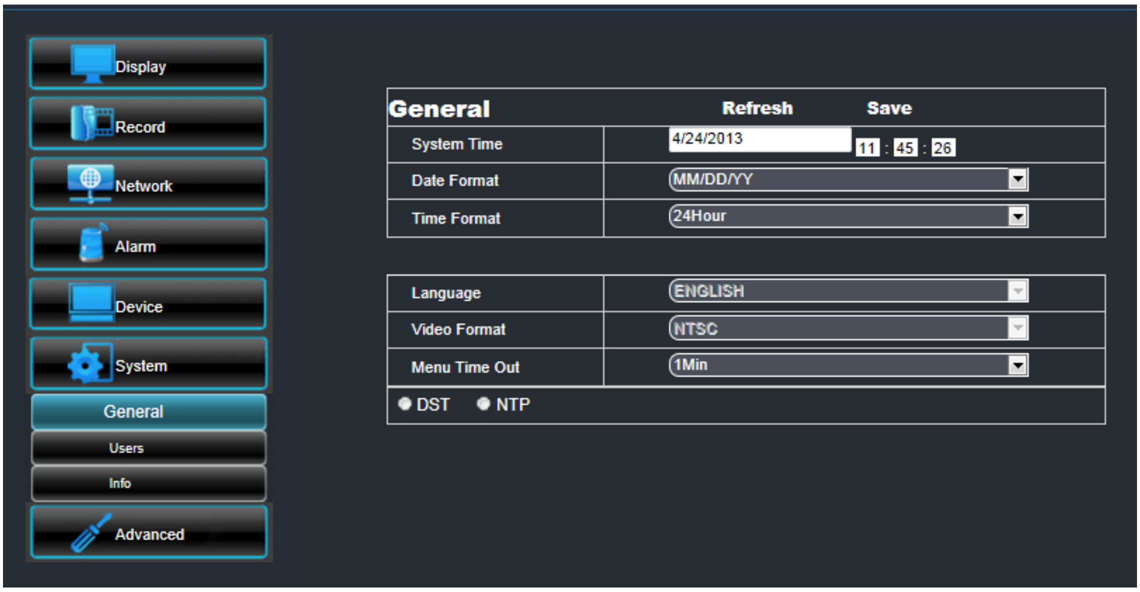
5.5.7 Managing System Settings

On the System Setup menu, you can modify the time zone and view the language used on the DVR and its signal source.

General Setup

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **System > General**. The General screen appears.


Display
Record
Network
Alarm
Device
System
General
Users
Info
Advanced
Refresh
Save

General

System Time	4/24/2013 11 : 45 : 26
Date Format	MM/DD/YY
Time Format	24Hour
Language	ENGLISH
Video Format	NTSC
Menu Time Out	1Min

● DST ● NTP

3 Modify the necessary settings:

Menu item	Description
System Time	Set the system date and time.
Date Format	Select the date format.
Time Format	Select the time format.
Language	Select the desired on-screen language.
Video Format	Select the video format in your location. Options are: **NTSC** or **PAL**.
Menu Time Out	Select the menu time out.

4 After all settings are complete, click **Save**.

« TIP »

To cancel any modifications and retain the existing settings, click **Refresh**.

Administrator Account Setup

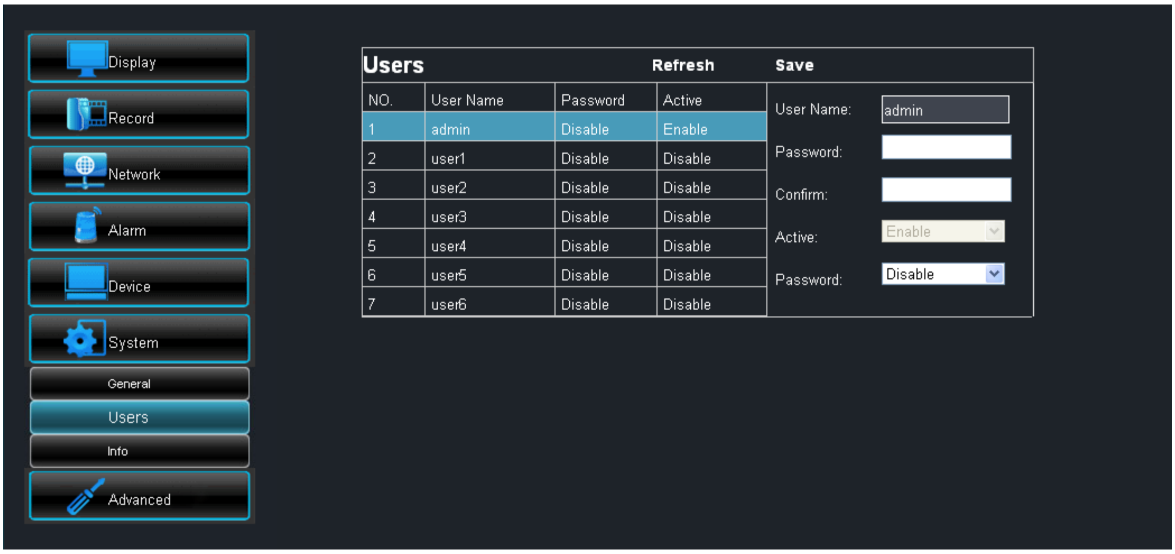
Use the Users menu to change the login password and grant user access rights to DVR settings. Only the administrator can authorize and grant access rights to users.

There is only one administrator account and six user accounts. By default, the administrator account's user name is "admin" and the password is 123456. We suggest you change the password to protect your privacy.

To change the administrator password, do the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **System** > **User**. The Users screen appears.



NO.	User Name	Password	Active
1	admin	Disable	Enable
2	user1	Disable	Disable
3	user2	Disable	Disable
4	user3	Disable	Disable
5	user4	Disable	Disable
6	user5	Disable	Disable
7	user6	Disable	Disable

User Name: admin

Password:

Confirm:

Active: Enable

Password: Disable

3 Select the administrator account, named "admin" by default, from the table.

4 Enter the desired password on **Password** and **Confirm**.

Note:

- The password must be 6 numbers in length.
- The entered text on **Password** and **Confirm** must match.

« TIP »

You can modify the administrator user name if desired. To do so, enter the desired name on the **User Name** field.

5 Enable **Password**.

6 After all settings are complete, click **Save**.

« TIP »
To cancel any modifications and retain the existing settings, click **Refresh**.

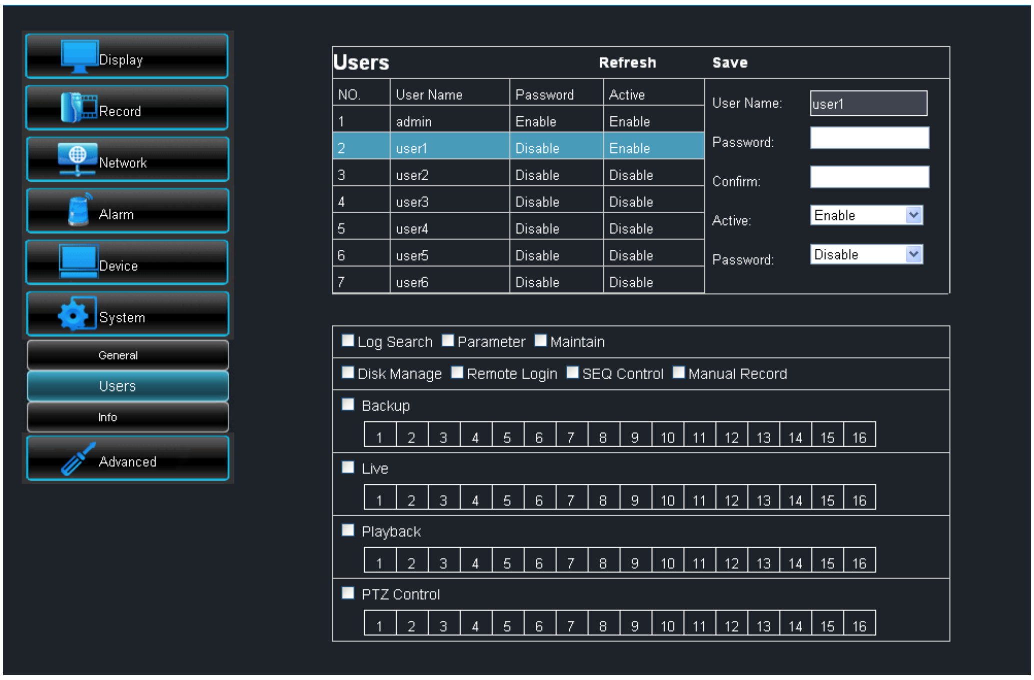
User Account Setup

To authorize user accounts, you must login with an administrator account and then do the following:

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **System** > **User**. The Users screen appears.

3 Select the user account from the table.



NO.	User Name	Password	Active
1	admin	Enable	Enable
2	user1	Disable	Enable
3	user2	Disable	Disable
4	user3	Disable	Disable
5	user4	Disable	Disable
6	user5	Disable	Disable
7	user6	Disable	Disable

User Name: user1
Password:
Confirm:
Active: Enable
Password: Disable

☐ Log Search ☐ Parameter ☐ Maintain
☐ Disk Manage ☐ Remote Login ☐ SEQ Control ☐ Manual Record
☐ Backup
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
☐ Live
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
☐ Playback
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
☐ PTZ Control
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

4 On **User Name**, enter the desired user name.

5 Enter the desired password on the **Password** and **Confirm** fields.

6 On **Active**, select **Enable**. The access rights table appears below.

7 Enable **Password**.

8 Check the settings that the user is allowed to access on the access rights table.

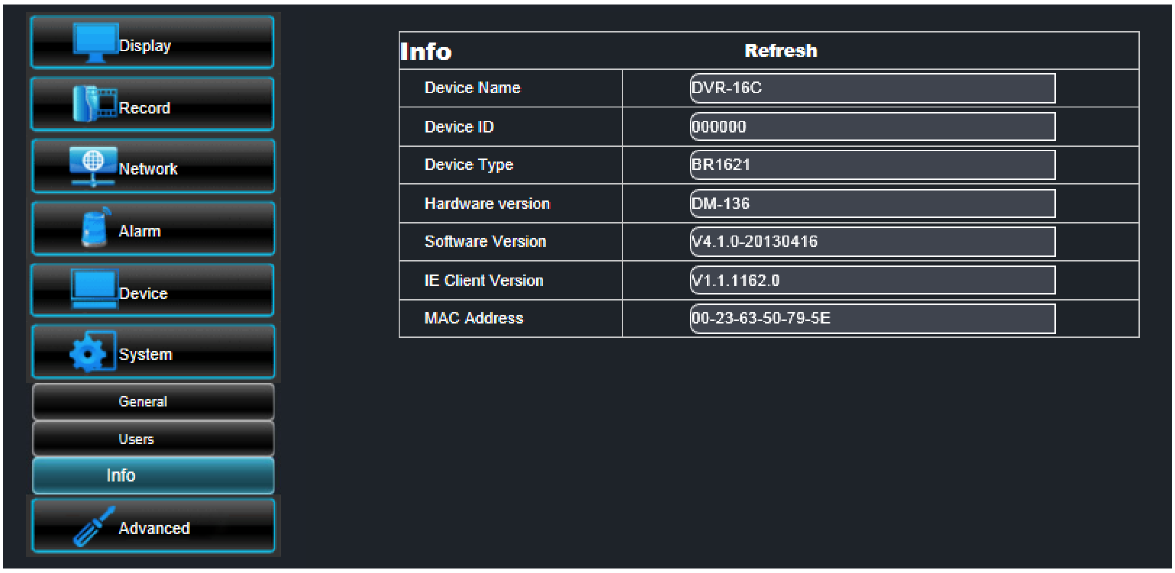
9 When all settings are complete, click **Save**.

System Information

Use the Information menu to view the device and firmware information.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **System** > **Info**. The Information screen appears.


Display
Record
Network
Alarm
Device
System
General
Users
Info
Advanced
Info
Refresh

Device Name	DVR-16C
Device ID	000000
Device Type	BR1621
Hardware version	DM-136
Software Version	V4.1.0-20130416
IE Client Version	V1.1.1162.0
MAC Address	00-23-63-50-79-5E

5.5.8 Advanced Settings

The Advanced menu allows you to set automatic system maintenance, load factory defaults, update the firmware settings, or reboot and power off the DVR manually.

Firmware Update

Use this feature to update the firmware with the latest version.

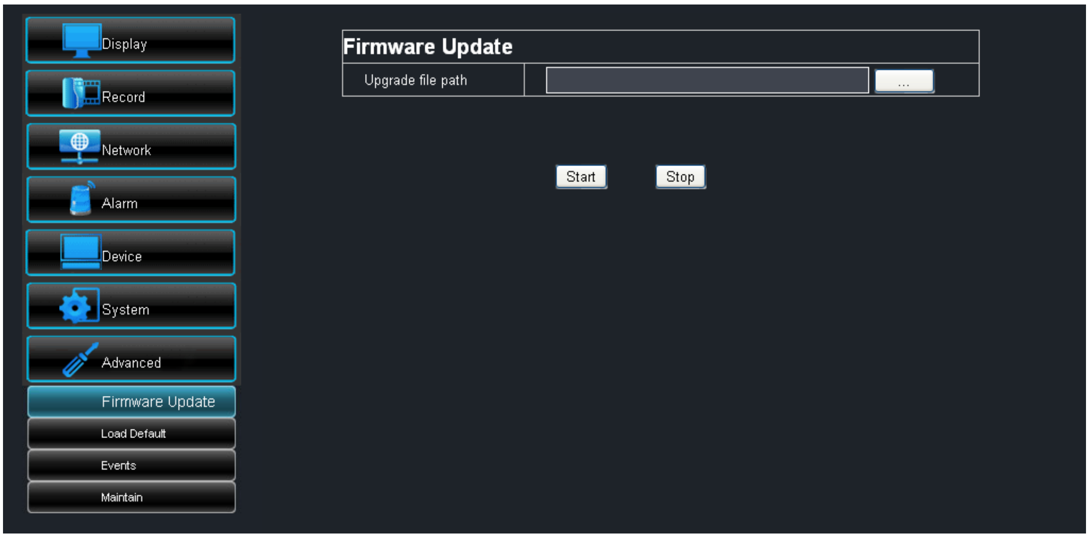
1 Check for available updates and download the firmware update folder named “dvrupgrade”.

2 Save the “dvrupgrade” folder in a USB flash drive.

3 Insert the USB flash drive into a USB port of the DVR.

4 On the Main Menu, click **Remote Setting**.

5 On the left panel, click **Advanced** > **Firmware Update**.


Display
Record
Network
Alarm
Device
System
Advanced
Firmware Update
Load Default
Events
Maintain
Firmware Update
Upgrade file path
...
Start
Stop

6 Browse for the update file, then click **Start**.

7 Follow the instructions on the screen to complete the update.

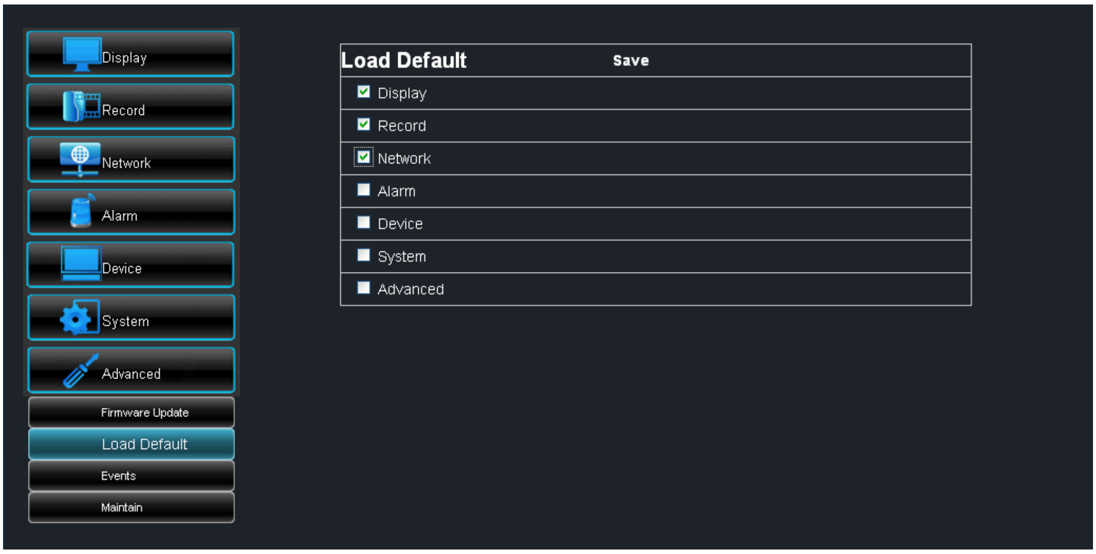
Warning:
Do not turn off the power or unplug from the power supply while updating.

Load Default Settings

Use this feature to restore the factory default settings of the DVR.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Advanced** > **Load Default**.


Display
Record
Network
Alarm
Device
System
Advanced
Firmware Update
Load Default
Events
Maintain
Save

Load Default

☑ Display
☑ Record
☑ Network
☐ Alarm
☐ Device
☐ System
☐ Advanced

3 Check the menu settings that you want to restore to default values.

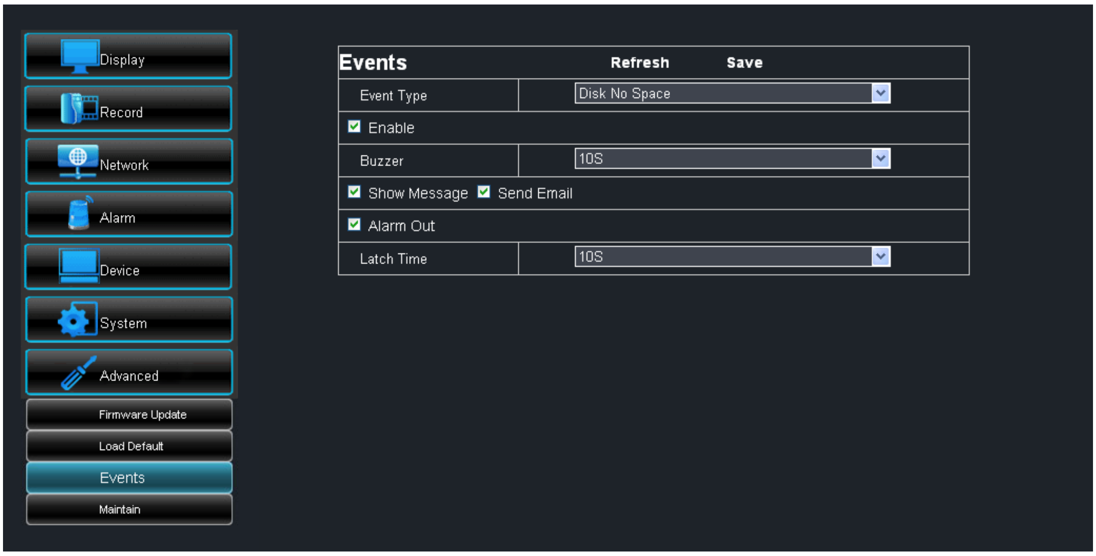
4 Click **Save**.

Events Settings

The Events page allows you to define the type of events for the DVR to issue an alarm.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Advanced** > **Events**.


Display
Record
Network
Alarm
Device
System
Advanced
Firmware Update
Load Default
Events
Maintain
Refresh
Save

Events

Event Type: Disk No Space
☑ Enable
Buzzer: 10S
☑ Show Message ☑ Send Email
☑ Alarm Out
Latch Time: 10S

3 Configure the necessary settings.

Menu Item	Description
Event Type	Select the event type. Options are: • **Disk No Space**: When HDD is full. • **Disk Error**: If HDD is not detected properly. • **Video Loss**: If camera is not detected properly.

Menu Item	Description
Enable	Select **Enable** to issue a notification when the event type occurs.
Buzzer	Set the buzzer duration when the event occurs (Off/10 S/20 S/40 S/60 S). To disable buzzer, select **Off**.
Show Message	Check the box to display a message on the screen when the event occurs.
Send Email	Check to enable email alarm notification. If the function is enabled, the system will send the alarm to the specified email address. See "4.4.3 Email Settings" on page 54.
Alarm Out	If an alarm device is connected, check the box to make the device sound the alarm when the event occurs.
Dwell Time	Select the alarm duration (10S/20S/40S/60S).

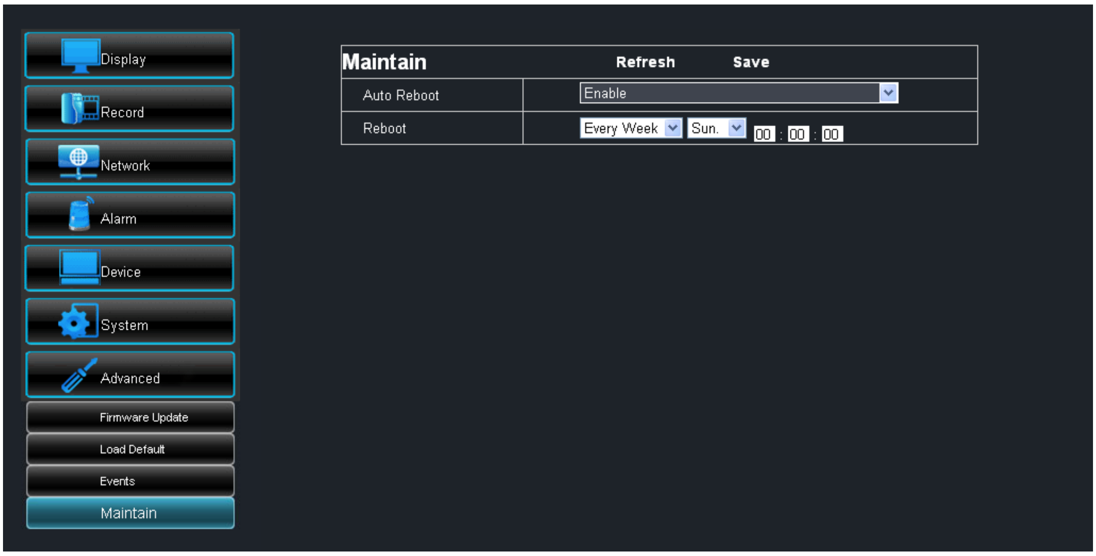
4 After all settings are complete, click **Save**.

Set Auto Maintenance

Use this feature to automatically reboot the DVR on a specified schedule. When the DVR reboots, all settings and data are refreshed from the memory, which optimizes the DVR performance.

1 On the Main Menu, click **Remote Setting**.

2 On the left panel, click **Advanced** > **Maintain**.



Auto Reboot: Enable

Reboot: Every Week, Sun., 00 : 00 : 00

3 Set **Auto Maintain** to **Enable**.

4 In **Reboot**, select the frequency to reboot the DVR. Options are:

- **Everyday**: Reboots the DVR on a daily basis. If this option is selected, specify the time you want to reboot the DVR.
- **Every Week**: Reboots the DVR on a weekly basis. If this option is selected, specify the day of the week and the time to reboot the DVR.
- **Every Month**: Reboots the DVR on a monthly basis. If this option is selected, specify the date (1 to 31) and the time to reboot the DVR.

Note:
The illustration above is an example of Auto Reboot set to Every Week. The available fields vary depending on the selected Reboot option.

5 After all settings are complete, click **Save**.

« TIP »
To restore the maintenance schedule to default setting, click **Refresh**.

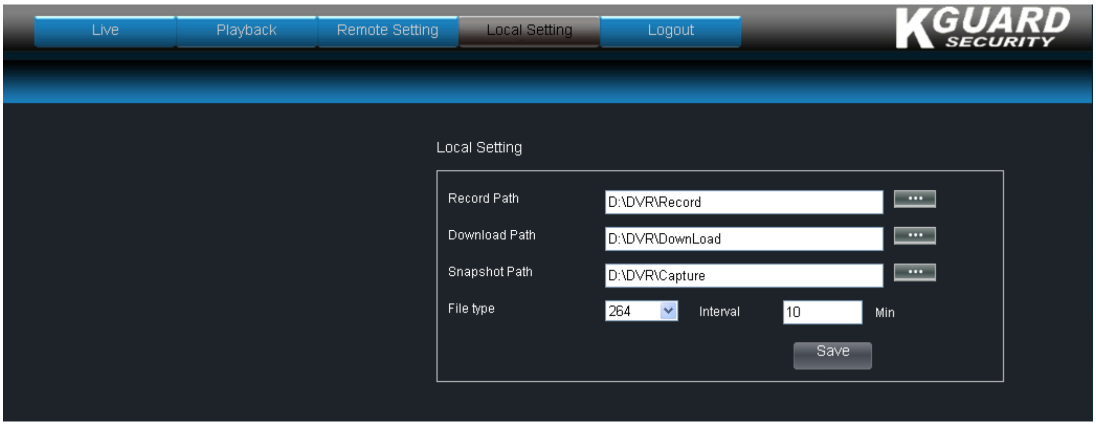
5.6 Local Settings

Use the Local Setting menu to specify the local path directory to save downloaded videos, files, and snapshots.

To configure the local settings, do the following:

1 On the Main Menu, click **Local Setting**.

2 Click the corresponding browse button to modify the path.



Record Path: D:\DVR\Record

Download Path: D:\DVR\DownLoad

Snapshot Path: D:\DVR\Capture

File type: 264 Interval: 10 Min

Menu Item	Description
Record Path	All manual recording made from the Live screen are saved in this path.
Download Path	All downloaded videos from the Playback screen are saved in this path.
Snapshot Path	All captured snapshots are saved in this path.
File Type	Select the file type. Options are: **264** (H.264 format) or **avi**.
Interval	Set the interval time in minutes.

3 Click **Save**.

Chapter 6: Using KView Series Software

The KView Series surveillance software provides real-time multi-channel viewing capabilities right on your smart phones, tablet PCs or on your desktop computer. The KView Series surveillance software includes:

- **KViewQR**: Use in Android Phones and iPhones (see below)
- **KView Center**: Use in Windows-based computers (see “6.2 KView Center” on page 108)

6.1 KViewQR

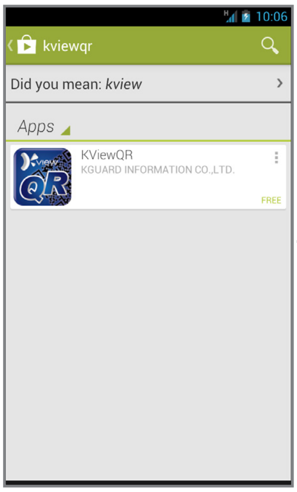
KViewQR is a software application specially designed for DVR with easy network setup functionality. You can instantly view the connected DVR in real-time through your smart phone/pad by simply scanning the QR code, without the hassle of complicated network configuration.

1 Make sure your mobile phone is connected to WIFI, to the same Router as DVR.

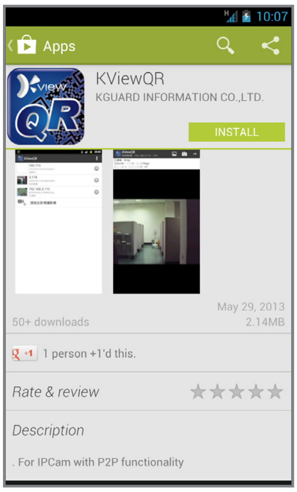
2 Open the **Play Store** or **App Store** application.

3 On the search bar, enter the keyword “**kviewqr**” to search and download KViewQR.

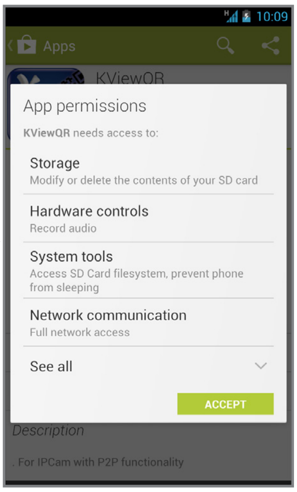
4 Select to download **KViewQR**.


10:06
kviewqr
Did you mean: kview
Apps
KViewQR
KGUARD INFORMATION CO.,LTD.
FREE

Select the “**KViewQR**” application.


10:07
Apps
KViewQR
KGUARD INFORMATION CO.,LTD.
INSTALL
May 29, 2013
50+ downloads
2.14MB
1 person +1'd this.
Rate & review
Description
. For IPCam with P2P functionality

Click **INSTALL**.

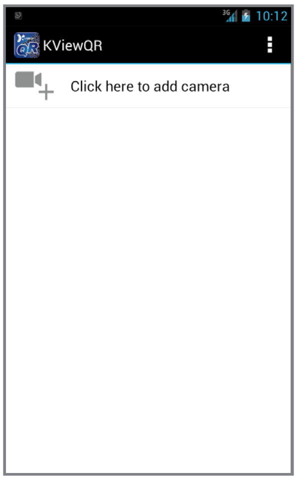

10:09
Apps
KViewQR
App permissions
KViewQR needs access to:
Storage
Modify or delete the contents of your SD card
Hardware controls
Record audio
System tools
Access SD Card filesystem, prevent phone from sleeping
Network communication
Full network access
See all
ACCEPT
Description
. For IPCam with P2P functionality

Click **ACCEPT**.

The **KViewQR** icon is displayed on the application screen.

5 Tap the **KViewQR** icon to open the application.

6 Tap **+** to add a DVR.


10:12
KViewQR
Click here to add camera

7 Tap **Scan** to scan the QR code sticker on the top of the DVR. To manually enter the QR code , enter the DVR ID as shown on sticker.

Note:

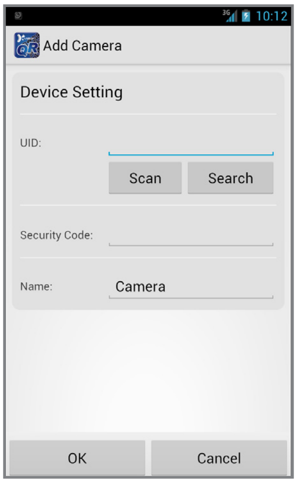
To scan the QR code, place the barcode inside the viewfinder rectangle.

8 Enter the Security Code (password) of connected DVR and change the DVR name (if necessary).

9 After all settings are complete, tap **OK**.

Note:

- The QR code is shown on the sticker on the top of the DVR.
- Be sure to install Barcode Scanner application before scanning the QR code.
- The above illustrations using an Android smartphone.


Add Camera

Device Setting

UID:

Security Code:

Name: Camera

6.2 KView Center

KView Center is a software application tool designed for computers running Windows OS.

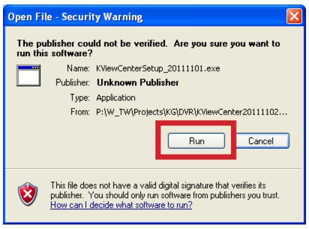
Note:

To ensure optimum performance, make sure the OS of your computer is Windows 7 or Windows XP.

To install KView Center on your computer, perform the following steps:

1 Browse the CD that came with your DVR and double-click on "**KViewCenterSetup.exe**".

2 When the security warning appears, click **Run**.

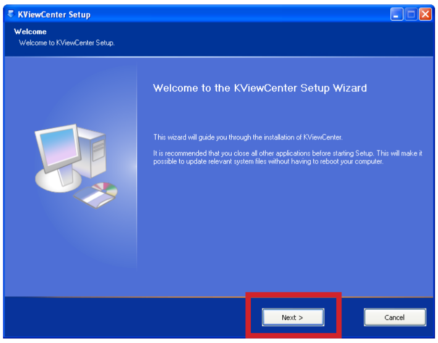

Open File - Security Warning

The publisher could not be verified. Are you sure you want to run this software?

Name: KViewCenterSetup_20111101.exe
Publisher: **Unknown Publisher**
Type: Application
From: P:\W_TW\Projects\KG\DVR\KViewCenter20111102...

This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust.
How can I decide what software to run?

3 The KViewCenter Setup screen appears. Click **Next** to continue.


KViewCenter Setup

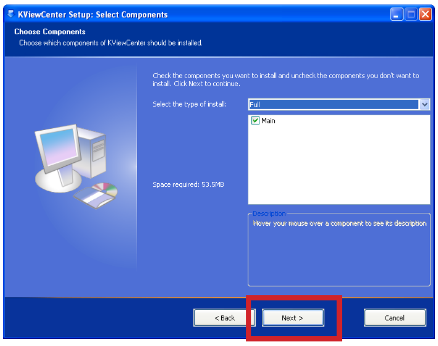
Welcome
Welcome to KViewCenter Setup.

Welcome to the KViewCenter Setup Wizard

This wizard will guide you through the installation of KViewCenter.

It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

4 Select **Full** and then click **Next** to continue.


KViewCenter Setup: Select Components

Choose Components
Choose which components of KViewCenter should be installed.

Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.

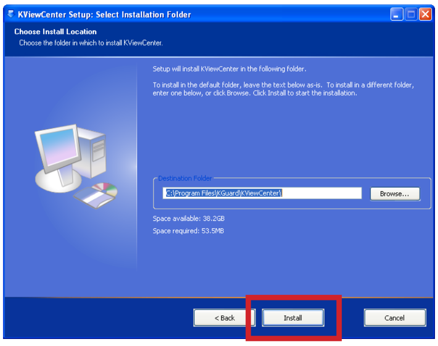
Select the type of install: Full

☑ Main

Space required: 53.5MB

Description
Hover your mouse over a component to see its description

5 Browse for desired path to save the software, and then click **Install**.



Choose Install Location
Choose the folder in which to install KViewCenter.

Setup will install KViewCenter in the following folder.

To install in the default folder, leave the text below as-is. To install in a different folder, enter one below, or click Browse. Click Install to start the installation.

C:\Program Files\KGuard\KViewCenter\

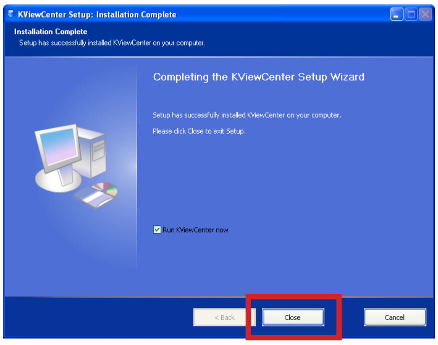
Space available: 38.2GB
Space required: 53.5MB

6 When the installation is complete, click **Close**.

The **KView Center** shortcut icon appears on the desktop.

7 Double-click to open KView Center.

Note: To login to KView Center, please enter the default user name and password.
User Name: **admin**
Password: **1234**



Installation Complete
Setup has successfully installed KViewCenter on your computer.

Completing the KViewCenter Setup Wizard

Setup has successfully installed KViewCenter on your computer.

Please click Close to exit Setup.

☑ Run KViewCenter now

6.3 KView Series Specifications

Surveillance Software	KViewQR		KViewCenter
Operating System	**Android**	**iOS**	**Windows**
OS Version	3.0 or above	5.0 or above	XP/7/8 (32/64bit)
Resolution	Monitor	Monitor	Monitor
Max. Live View Channel	1	1	64
Channel Layout	1	1	1/4/9/16/25/36/49/64
PTZ Control	YES	YES	YES
Digital Zoom	YES	YES	—
Live Snapshot	YES	YES	YES
Live Record	—	YES	—
Password Protection	—	—	YES
Event List	—	—	YES
Remote Playback	YES	YES	YES
Remote Playback Digit Zoom	—	YES	—
Remote Playback Snapshot	—	YES	—
Remote Playback Record	—	YES	—
Local Playback	—	YES	YES
Remote Backup	—	—	Up to 8 Channels Simultaneously
Schedule (Remote)	—	—	YES
E-Map	—	—	YES
Launch IE Browser	—	—	YES

Chapter 7: Troubleshooting & FAQ

7.1 Troubleshooting

If you experience any problems in using the DVR, try the following solutions to these common problems before calling for service. If problems persist, contact the customer service in your area.

Problem	Possible Solution
The DVR does not turn on and the indicators are not lit.	• Check if the power adapter is properly connected. • Plug the power cord to another power outlet, the current outlet may be damaged. • The power cord may be damaged, contact the dealer to purchase a new one.
Some channels have no video signal.	• Check if the camera is properly connected. • Check if the camera is supplied with power. • Set the correct video format used in your country (NTSC/PAL). See “4.7 System Settings” on page 65. • The camera cable may be damaged, replace with a new one.
An “H” is displayed on the screen and the DVR cannot detect the HDD.	• Check if the HDD data and power cables are properly connected. • For new HDDs, format the HDD first. See “Formatting HDD” on page 60. • If all the above procedures do not work, contact Customer Service for further support.
I have changed the administrator password but I cannot remember it.	• To obtain the factory default password, contact your retailer or directly send an email to KGUARD at support@kguardsecurity.com.
The remote control is not working but the front panel buttons are.	• Make sure nothing is blocking the remote control and the DVR sensor. Aim the remote control at a proper distance. • Check the remote control batteries.
I cannot control the PTZ camera.	• Make sure the protocol, baud rate, address code and other settings on the camera match the settings you have configured on the DVR. See “4.6.2 PTZ Setup” on page 61. • Check if the cables are properly connected.
The buzzer keeps on sounding.	• Check the alarm settings. Motion detection may be detected. Check the HDD capacity and the video connections, which may be triggering the alarm. • Disable buzzer on the DVR settings. See “4.5 Setting Alarms” on page 57.
I cannot find the PTZ Control menu.	• The DVR may be on Cruise mode, disable stop cruise mode first. See “3.4.4 Pop-up Menu” on page 31.
I connected an external storage device to the DVR but it cannot be recognized.	• The external storage device may not be compatible with the DVR. Try connecting other storage devices. See the Support Manual in the enclosed CD.
I cannot access the web client.	• Check if the network cable is properly connected to the DVR. • Check if the network settings are properly configured. See”4.4 Setting the Network” on page 52. • Ensure that you have Internet Explorer 6 or above.

Problem	**Possible Solution**
I cannot access the DVR through my mobile phone.	• Check if the network cable is properly connected to the DVR. • Check if the network settings are properly configured. See “4.4 Setting the Network” on page 52. • Make sure the mobile device utility is properly installed on your mobile phone.

7.2 Frequently Asked Questions

FAQ	**Answer**
How to check the DVR QR code?	• Go to **Main Menu** ⌂ > **SYSTEM** and select the **Info** tab. The QR code is displayed in **DVRID**.
What does “H” displayed on the screen mean?	• This means that the HDD cannot be detected or it is incorrectly formatted.
The DVR is hot to the touch, will this cause any problems?	• For sustained performance and reliability, ensure adequate ventilation around the unit and keep the DVR away from direct sunlight or heat sources.
Can the HDD be upgraded with a standard PC hard drive?	• Yes, a 3.5” HDD with SATA connection can be used. However, for sustained reliability, a CCTV/AV hard drive is recommended.
Is it possible to simultaneously record and playback previously recorded files?	• Yes, by entering the Playback menu, existing recordings can be played while recording is still in progress.
Is it possible to delete individual recordings from the unit?	• No, you can only delete all recordings at the same time. If you wish to delete the recordings, you need to format the HDD. ⚠ **Warning:** Formatting the HDD will erase all existing recordings! Make sure you back up the files before performing this action.
Is it possible to view the system on Mac or Linux?	• Yes. The system can be used on a mobile phone or via Safari / Windows® Internet Explorer.

Appendix: Specifications

Model			**EL421**	**EL821**	**EL1621**
No. of Channel			4 Channels	8 Channels	16 Channels
Cloud					
Cloud Storage			Yes		
Storage Mode			Schedule / Motion Detection		
Video					
Video Format			NTSC or PAL		
Video Input			4 BNC Inputs	8 BNC Inputs	16 BNC Inputs
Video Output			1 VGA, 1 BNC, 1 HDMI Outputs		
Video Output Resolution			VGA: 800x600, 1024x768, 1280x1024, 1440x900, 1920x1080 HDMI: 1080p		
Audio					
Audio Input			2 RCA Inputs		4 RCA Inputs
Audio Output			1 RCA Output		
Recording					
Video Compression			H.264		
Frame Rate	DI	NTSC	120fps@CIF (360×240), 120fps@HD1 (720x240), 120fps@D1 (720x480)	240fps@CIF (360×240), 240fps@HD1 (720x240), 240fps@D1 (720x480)	480fps@CIF (360×240), 240fps@HD1 (720x240), 240fps@D1 (720x480)
		PAL	100fps@CIF (360×288), 100fps@HD1 (720x288), 100fps@D1 (720x576)	200fps@CIF (360×288), 200fps@HD1 (720x288), 200fps@D1 (720x576)	400fps@CIF (360×288), 192fps@HD1 (720x288), 192fps@D1 (720x576)
	960H	NTSC	120fps@WCIF (480×240), 120fps@WHD1 (960×240), 120fps@WD1 (960×480)	240fps@WCIF (480×240), 88fps@WHD1 (960×240), 88fps@WD1 (960×480)	480fps@WCIF (480×240), 176fps@WHD1 (960×240), 176fps@WD1 (960×480)
		PAL	100fps@WCIF (480×288), 100fps@WHD1 (960×288), 100fps@WD1 (960×576)	200fps@WCIF (480×288), 72fps@WHD1 (960×288), 72fps@WD1 (960×576)	400fps@WCIF (480×288), 144fps@WHD1 (960×288), 144fps@WD1 (960×576)
Recording Mode			Always / Manual / Motion Detection / Schedule		Always / Manual / Motion Detection / Schedule / Sensor / Alarm
HDD Interface			1 SATA		
HDD Support			Up to 2TB		
Network					
Network Interface			RJ45, 10M/100M		
Network Function			DHCP, PPPoE, Static IP		
Playback					
Local Playback			Max. 4 Channels Simultaneously	Max. 8 Channels Simultaneously	Max. 16 Channels Simultaneously
Playback Search			Date & Time / Event List / Time Bar		
Playback Mode			Play, Fast Forward, Fast Rewind, Slow Motion, Zoom		

Model	EL421	EL821	EL1621
General			
PTZ Control	RS485 Built-In, supports PELCO-P & PELCO-D		
Sensor & Alarm I/O Port	No		Yes
IR Extender Port	No		Yes
Backup Method	HDD, USB, Network		
Power Supply	12V/2A		12V/5A
Operating Temperature (without HDD)	-10°C to 50°C (14°F to 122°F)		
Storage Temperature	-20°C to 70°C (-4°F to 158°F)		
Working Humidity	10% ~ 90%		
Dimension (W x D x H)	250 x 230 x 45 mm		300 x 220 x 50 mm

* Specifications are subject to change without notice.

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Customer Support

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